Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

PUBLIC, LEGISLATIVE AFFAIRS, AND WATER RESOURCES COMMITTEE MEETING OF THE BOARD OF DIRECTORS INLAND EMPIRE UTILITIES AGENCY* AGENCY HEADQUARTERS, CHINO, CALIFORNIA

WEDNESDAY, SEPTEMBER 14, 2016
9:00 A.M.

CALL TO ORDER

PUBLIC COMMENT

Members of the public may address the Board on any item that is within the jurisdiction of the Board; however, no action may be taken on any item not appearing on the agenda unless the action is otherwise authorized by Subdivision (b) of Section 54954.2 of the Government Code. Those persons wishing to address the Board on any matter, whether or not it appears on the agenda, are requested to complete and submit to the Board Secretary a "Request to Speak" form, which are available on the table in the Board Room. Comments will be limited to five minutes per speaker. Thank you.

ADDITIONS TO THE AGENDA

In accordance with Section 54954.2 of the Government Code (Brown Act), additions to the agenda require two-thirds vote of the legislative body, or, if less than two-thirds of the members are present, a unanimous vote of those members present, that there is a need to take immediate action and that the need for action came to the attention of the local agency subsequent to the agenda being posted.

1. ACTION ITEMS

A. AUTHORIZING AGENCY MEMBERSHIP IN THE COALITION FOR ENVIRONMENTAL PROTECTION, RESTORATION AND DEVELOPMENT

It is recommended that the Committee/Board:

1. Approve membership in the Coalition for Environmental Protection, Restoration and Development for FY 2016/17, in the amount of $25,000; and

2. Authorize the General Manager to pay the annual dues.

B. ADOPTION OF A RESOLUTION ADOPTING THE CITY OF ONTARIO'S RECYCLED WATER DISTRIBUTION SYSTEM PROJECT CEQA DOCUMENTATION

It is recommended that the Committee/Board:

1. Adopt Resolution No. 2016-9-2, approving and adopting the Initial Study/Mitigated Negative Declaration, and the Mitigation Monitoring and Reporting Program as a CEQA-Responsible Agency; and

2. Authorize IEUA's General Manager to file the Notice of Determination (NOD) with the San Bernardino County Clerk of the Board.

C. CEQA ADOPTION – FONTANA WATER COMPANY RECYCLED WATER IMPROVEMENT PROJECT

It is recommended that the Committee/Board:

1. Adopt the California Environmental Quality Act (CEQA) Initial Study/Mitigated Negative Declaration for the Fontana Water Company Recycled Water Improvement Project; and

2. Authorize the General Manager to file the Notice of Determination (NOD) with the San Bernardino County Clerk of the Board.

D. APPOINTMENT OF IEUA ALTERNATE TO PA 23 COMMITTEE

It is recommended that the Committee/Board approve the appointment of IEUA's Santa Ana Watershed Project Authority (SAWPA) Commissioner to serve as the alternate committee member to the PA 23 Committee.

E. 2016 PRADO BASIN ADAPTIVE MANAGEMENT PLAN

It is recommended that the Committee/Board approve the proposed cost share for the ongoing O&M of the Prado Adaptive Management Plan.

F. IMPORTED WATER SERVICES CONNECTION SHARED USE AGREEMENT

It is recommended that the Committee/Board:

1. Approve the Imported Water Service Connection Shared Use Agreement with Western Municipal Water District; and

2. Authorize the General Manager to execute the agreement.

G. ADOPTION OF RESOLUTION FOR `TIER 1 ALLOCATIONS FOR PURCHASE OF IMPORTED WATER

It is recommended that the Committee/Board approve Resolution No. 2016-9-1, establishing allocations for the purchase of imported water within the IEUA service area.

2. INFORMATION ITEMS

A. PUBLIC OUTREACH AND COMMUNICATION (WRITTEN)

B. LEGISLATIVE REPORTS (WRITTEN)
1. Innovative Federal Strategies
2. West Coast Advisors
3. Agricultural Resources

C. CALIFORNIA STRATEGIES MONTHLY REPORT (WRITTEN)

D. STATE LEGISLATION MATRIX (WRITTEN)

E. WATER SOFTENER REBATE PROGRAM STATUS REPORT (WRITTEN)

F. RECYCLED WATER SEMI-ANNUAL UPDATE FY 2015/16 AND THE ANNUAL RECYCLED WATER REPORT FOR FY 2015/16 (WRITTEN)

G. PLANNING & ENVIRONMENTAL RESOURCES UPDATE (ORAL)

3. GENERAL MANAGER'S COMMENTS

4. COMMITTEE MEMBER COMMENTS

5. COMMITTEE MEMBER REQUESTED FUTURE AGENDA ITEMS

6. ADJOURN

***A Municipal Water District**

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Board Secretary (909-993-1736), 48 hours prior to the scheduled meeting so that the Agency can make reasonable arrangements.

Proofed by: AR

DECLARATION OF POSTING

I, April Woodruff, Board Secretary of the Inland Empire Utilities Agency, A Municipal Water District, hereby certify that a copy of this agenda has been posted by 5:30 p.m. in the foyer at the Agency's main office, 6075 Kimball Avenue, Building A, Chino on Thursday, September 8, 2016.

April Woodruff

ACTION ITEM 1A

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Date:	September 21, 2016
To:	The Honorable Board of Directors
Through:	Public, Legislative Affairs and Water Resources Committee *(9/14/16)*
From:	P. Joseph Grindstaff General Manager
Submitted by:	Kathy Besser Manager of External Affairs
Subject:	Authorizing Agency Membership in the Coalition for Environmental Protection, Restoration and Development

RECOMMENDATION

It is recommended that the Board of Directors:

1. Approve membership in the Coalition for Environmental Protection, Restoration and Development for FY 2016/17, in the amount of $25,000; and

2. Authorize the General Manager to pay the annual dues.

BACKGROUND

The Coalition for Environmental Protection, Restoration and Development (CEPRD) has established a Regional Reliability and Sustainability Project to look into incorporating groundwater basins with regional water supply solutions. Spearheaded by the Los Angeles Department of Water and Power, CEPRD members include the Metropolitan Water District of Southern California, Orange County Water District, San Gabriel Basin Water Quality Authority, Central Basin Municipal Water District and the Long Beach Water Department.

In July 2014, legislation was signed transferring the State's Division of Drinking Water (DDW) from the Department of Public Health (DPH) to the State Water Resources Control Board (SWRCB). As the DDW transitions to SWRCB, CEPRD is hoping that the regional water agencies can become partners with the regional boards in getting permits approved.

At issue is DPH Policy Memo 97-005 from the DDW which states "Extremely impaired sources that contain… multiple contaminants… should not be considered for human consumption if alternatives

are available." This includes instances where it can be demonstrated that a source of water can meet standards with multiple fail safes in place. This makes the process of permitting difficult and have restricted the ability to incorporate groundwater basins into overall water supply solutions.

The issue does not apply directly to the Chino Basin, which is the only basin in southern California that has been granted "maximum beneficial" use of water. This allows IEUA to blend recycled water, stormwater and imported water in our basins, which is significant in ensuring drought resiliency in the region. As regulations evolve, any changes could have a significant impact on the Agency at that time. Staff believes it is prudent to ensure State policy continues to be supportive of our efforts.

There needs to be consistency across the region, and as regional stewards of water and leaders in water policy, it would benefit IEUA to assist CEPRD and the member agencies in achieving the change needed in State policy.

Representation: Joe Grindstaff

Dues: $25,000

PRIOR BOARD ACTION

None.

IMPACT ON BUDGET

The proposed membership fee in the amount of $25,000 will be appropriated in the Agency's FY 2016/17 Administrative Services Fund under account number 10200-100000-514010, Agency-wide Memberships.

ACTION ITEM 1B

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Date:	September 21, 2016
To:	The Honorable Board of Directors
Through:	Public, Legislative Affairs, & Water Resources Committee *(9/14/16)* Finance, Legal, & Administration Committee *(9/14/16)*
From:	P. Joseph Grindstaff General Manager
Submitted by:	Chris Berch Executive Manager of Engineering/Assistant General Manager
	Jason Gu Grants Officer
Subject:	Adoption of Resolution Adopting the City of Ontario's Recycled Water Distribution System Project CEQA Documentation

RECOMMENDATION

It is recommended that the Board of Directors:

1. Adopt Resolution No. 2016-9-2, approving and adopting the Initial Study/Mitigated Negative Declaration, and the Mitigation Monitoring and Reporting Program as a CEQA-Responsible Agency; and

2. Authorize IEUA's General Manager to file the Notice of Determination (NOD) with the San Bernardino County Clerk of the Board.

BACKGROUND

In April 2015, the State Water Resources Control Board (SWRCB) announced the Proposition 1 (Prop 1) grant funding opportunity for Water Recycling projects, which will provide 35% in Prop 1 grant combined with a 30-year State Revolving Fund Loan (SRF) loan.

IEUA submitted the 2015 Drought Relief Recycled Water Supply Optimization Program Phase-1 grant and SRF loan application. The City of Ontario's Euclid/Riverside Recycled Water Pipeline Project is one of the nine project components proposed in this application.

The City's project will construct 18 miles of Recycled Water pipeline, two booster pump stations and retrofits with a total estimated cost of $22,639,081. The City's project will deliver 476 acre-

feet per year (AFY) recycled water to its customers which will benefit the City, IEUA, as well as the region.

On September 6, 2016, the Ontario City Council adopted the Initial Study/Mitigated Negative Declaration (IS/MND), the Mitigation Monitoring and Reporting Program and approved the Project. As the applicant, IEUA is required also to adopt a resolution as the CEQA-Responsible Agency to satisfy grant and SRF loan application procedural requirement. The City will be the lead agency in the planning, design, and construction of the project.

Assisting the City with the completion of this grant and SRF loan application, demonstrates the integrated regional approach of recycled water supply optimization. It is consistent with the Agency's Business Goal of increasing Water Supply Reliability by meeting the region's need to develop reliable, drought-proof, and diverse local water resources.

PRIOR BOARD ACTION

On November 18, 2015, the Board adopted Resolution Nos. 2015-9-2 through 2015-9-4, authorizing the General Manager to sign and file application and agreement with the SWRCB, for the design and construction of the Joint IEUA-City of Ontario 2015 Drought Relief Recycled Water Supply Optimization Program Phase-1 Project, and authorized the General Manager to negotiate an agreement with the City that allows IEUA to apply for the SRF loan and grant on behalf of the City, and authorizes IEUA to pass through the awards to the City.

IMPACT ON BUDGET

None.

Attachments:
Resolution No. 2016-9-2

Please use the link below to access complete CEQA documents:
https://www.dropbox.com/s/tk9j73c9irb8idx/16231%20Initial%20Study-MND%20Ontario%20RW%20Distr%20System%20%28August%202016%29.pdf?dl=0

RESOLUTION NO. 2016-9-2

RESOLUTION OF THE BOARD OF DIRECTORS OF THE INLAND EMPIRE UTILITIES AGENCY*, SAN BERNARDINO COUNTY, CALIFORNIA, APPROVING AND ADOPTING THE INITIAL STUDY/MITIGATED NEGATIVE DECLARATION AND MITIGATION MONITORING AND REPORTING PROGRAM FOR THE EUCLID AVENUE/RIVERSIDE DRIVE RECYCLED WATER DISTRIBUTION SYSTEM PROJECT

WHEREAS, the City of Ontario (the City) proposed the Euclid Avenue/Riverside Drive Recycled Water Distribution System that will connect to Inland Empire Utilities Agency Recycled water system and will serve irrigation needs to parks and schools and the central median along the Euclid Avenue/Riverside Drive corridor and will include two booster pump stations; and

WHEREAS, the types of facilities included in the Euclid Avenue/Riverside Drive Recycled Water Service Distribution System Project are necessary for the City to convey recycled water to the City's schools, parks and the median located along the Riverside/Euclid corridor. The Euclid Avenue Recycled Water Distribution System Project is an integral part of the City's plan to increase the use of recycled water and will establish a network of transmission and distribution main lines that will deliver recycled water to two regions consisting of several phases of construction. The region along Euclid Avenue is bounded by Baker Avenue to the East, James Bryant Park and D Street to the North, Oaks Street to the West, and Centennial Park to the South. The region along Riverside Drive is bounded by Mill Creek Road to the East, Archibald Avenue to the West, and extends North along Haven Avenue extending into the eastern (Lytle Creek Loop) and western (Deer Creek Loop) portions of the Creekside development (the "Project"); and

WHEREAS, the City and Agency staff have determined that proceeding with the Euclid Avenue/Riverside Drive Recycled Water Service Distribution System Project is a "project" as defined by the California Environmental Quality Act, Public Resources Code Section 21000 *et seq.* (CEQA); and

WHEREAS, after completion of an Initial Study consisting of an environmental checklist form, it was determined that the Project required a Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program in compliance with the provisions of CEQA; and

WHEREAS, the City provided a Notice of Intent (NOI) to adopt the proposed Initial Study/Mitigated Negative Declaration to the State Clearinghouse, San Bernardino County Clerk of the Board, various agencies and interested parties, and also published said NOI in The Press-Enterprise, a local general circulation newspaper, regarding the 30-day public review period; and

WHEREAS, the City made the proposed Initial Study/Mitigated Negative Declaration available for public review beginning on August 5, 2016, and concluding on September 6, 2016 a period of not less than 30 days as prescribed by law; and

WHEREAS, the Project and the Initial Study/Mitigated Negative Declaration, and Mitigation Monitoring and Reporting Program have been presented to the IEUA Board, attached hereto as Exhibit "A" and made a part thereof, and the Board has carefully reviewed these documents and all of the information contained in the record for the Project; and

WHEREAS, the Project was prepared pursuant to CEQA, the State CEQA Guidelines, and the City's Local CEQA Guidelines; and

WHEREAS, all other legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, BE IT RESOLVED, DETERMINED AND ORDERED BY THE BOARD OF DIRECTORS OF THE INLAND EMPIRE UTILITIES AGENCY AS FOLLOWS:

Section 1. The above recitals are incorporated herein by reference.

Section 2. Environmental Findings. The IEUA Board, in light of the whole record before it including, but not limited to, the Initial Study/MND and documents incorporated therein by reference, the proposed Mitigation Monitoring and Reporting Program and other substantial evidence (within the meaning of Public Resources Code Sections 21080(e) and 21082.2) within the record and/or provided at the public meeting, hereby finds and determines as follows:

(1) Acting as a CEQA Responsible Agency the IEUA Board has independently reviewed and considered the Initial Study and the Mitigated Negative Declaration (MND).

Review Period: That the City has provided the public review period for the Initial Study/Mitigated Negative Declaration for the duration required under CEQA Guidelines Sections 15073 and 15105.

Compliance with Law: That the Initial Study/Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program were prepared, processed, and noticed in accordance with the California Environmental Quality Act (Public Resources Code Section 21000 *et seq.*), the CEQA Guidelines (14 California Code of Regulations Section 15000 *et seq.*) and the City's Local CEQA Guidelines.

Independent Judgment: That the Initial Study/Mitigated Negative Declaration reflect the independent judgment and analysis of the City.

Section 3. Adoption of the Initial Study/Mitigated Negative Declaration and Approval of the Project. The IEUA Board acting as a CEQA Responsible Agency has considered and hereby approves and adopts the Initial Study/Mitigated Negative Declaration prepared for the Euclid Avenue/Riverside Drive Recycled Water Service Distribution System Project and approves the Project.

Section 5. Notice of Determination. The IEUA Board directs Agency staff to prepare, execute, and file a Notice of Determination with the San Bernardino County Clerk of the Board within five (5) working days of the passage and adoption of this Resolution.

Section 6. Custodian of Records. The documents and materials that constitute the record of proceedings on which these findings are based are located at 6075 Kimball Avenue, Chino Hills, California 91708. The custodian of these records is, IEUA Board Secretary.

Section 7. Effective Date. This resolution shall take effect immediately upon its adoption.

Section 8. DECISION. That the Board of Directors does hereby approve the Initial Study, Mitigated Negative Declaration as a CEQA Responsible Agency that were previously adopted by the City of Ontario City Council.

ADOPTED this 21st day of September, 2016

Terry Catlin, President of the Inland Empire Utilities Agency* and of the Board of Directors thereof

ATTEST:

Steven J. Elie, Secretary/Treasurer of the Inland Empire Utilities Agency* and of the Board of Directors thereof

(SEAL)

* A Municipal Water District

STATE OF CALIFORNIA)
)SS
COUNTY OF SAN BERNARDINO)

I, Steven J. Elie, Secretary/Treasurer of the Inland Empire Utilities Agency*, DO HEREBY CERTIFY that the foregoing Resolution being No. 2016-9-2 was adopted at a regular Board Meeting on September 21, 2016, of said Agency by the following vote:

AYES:

NOYES:

ABSTAIN:

ABSENT:

_____
Steven J. Elie, Secretary/Treasurer

*A Municipal Water District

NOTICE OF DETERMINATION

To: Office of Planning and Research
1400 Tenth Street, Room 121
Sacramento, CA 95814

and

San Bernardino County
Clerk of the Board of Supervisors
385 N. Arrowhead Avenue, 2nd Floor
San Bernardino, CA 92415

From: Inland Empire Utilities Agency
6075 Kimball Avenue
Chino, CA 91708

Subject: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

CITY OF ONTARIO RECYCLED WATER DISTRIBUTION SYSTEM PROJECT
Project Title

SCH #2016081019	Liza Muñoz, P.E.	(909) 993-1522
State Clearinghouse Number	**Lead Agency Contact Person**	**Area Code/Telephone/Extension**

Project Location: The proposed Recycled Water Distribution System Project (Project) is located in the City of Ontario, California. The proposed recycled water main pipeline will be located along Euclid Avenue with a point of connection to an existing median irrigation pipeline at Euclid Avenue just north of D Street. The pipeline will continue on Euclid Avenue to Riverside Drive, which is a distance of about 3.3 miles; however, the pipeline is disrupted on Euclid Avenue between Philadelphia Street and Geyer Court. Lateral pipelines branch off of this trunk system to the west and east to intercept park and school locations that will use recycled water for irrigation in place of potable water. These segments are as follows in a list representing branches categorized from north to south: D Street between San Antonio Avenue and Euclid Avenue; Mission Boulevard between Cypress Avenue and Bon View Avenue; Cypress Avenue from West Mission Boulevard to Cypress Avenue Park which is between West Maitland Street and West Ralston Street on Cypress Avenue; Bon View Avenue between Mission Boulevard and Bon View Park, which is between East Maitland Street and East Belmont Street on Bon View Avenue; Phillips Street between South Fern Avenue and Euclid Avenue; Francis Street between South Oaks Avenue and South Bon View Avenue; South Oaks Avenue from Juniper Street to Homer F. Briggs Park which is between Cedar Street and West Spruce Court on South Oaks Avenue; South Cypress Avenue from West Francis Street to Philadelphia Street; South Bon View Avenue from East Francis Avenue to East Philadelphia Street; West Philadelphia Street from Ontario Christian High School, which is between South Palmetto Avenue and South Cypress Avenue, to Cypress Avenue; East Philadelphia Street from South Campus Avenue to South Baker Avenue where it will meet the proposed connection to the City 1050 Pressure Zone; South Campus Avenue from East Philadelphia Street to South Bon View Avenue from South Hope Place to East Philadelphia Street; West Philadelphia Street to Ontario Centennial Park, which is on Campus Avenue just before East Riverside Drive; East Walnut Street from South Euclid Avenue to South Campus Avenue.

Project Description: The Project proposes to reduce its use of potable water, specifically for landscape irrigation applications. The proposed recycled water pipeline will provide a connection point to the existing recycled water pipeline within Euclid Avenue—between the I-10 and Riverside Drive—and the parks surrounding the Euclid Avenue corridor with recycled water to be used for irrigation. In addition, a pipeline will be installed to connect two existing OMUC recycled water lines in Riverside Drive to provide recycled water to the service area north of Riverside Drive including the Deer Creek Loop, Lytle Creek Loop, and their surrounding common landscaping. The proposed Project will also construct a booster pump station within the Euclid Avenue median at Fourth Street and another at one of three proposed alternative pump station locations on South Bon View Avenue.

Notice of Determination
Page 2 of 2

This is to advise that the Inland Empire Utilities Agency has approved the above described

☐ Lead Agency ■ Responsible Agency

project on _____ and has made the following determination regarding the project:
(Date)

1. The project [☐ will ■ will not] have a significant effect on the environment.
2. ☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   ■ A Mitigated Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [■ were ☐ were not] made a condition of the approval of the project and a Mitigation Monitoring and Reporting Plan was adopted.
4. A Statement of Overriding Considerations [☐ was ■ was not] adopted for this project.

This is to certify that the Mitigated Negative Declaration/Initial Study and record of project approval is available to the general public at:

Inland Empire Utilities Agency located at 6075 Kimball Avenue, Chino, CA 91708

_____

Signature *Title* *Date*

CEQA Adoption for the City of Ontario RW Project Grant/SRF Loan Application

Jason H. Gu
Grants Officer

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

IEUA Board of Directors Meeting
September 2016

Joint Grant/SRF Loan Applications

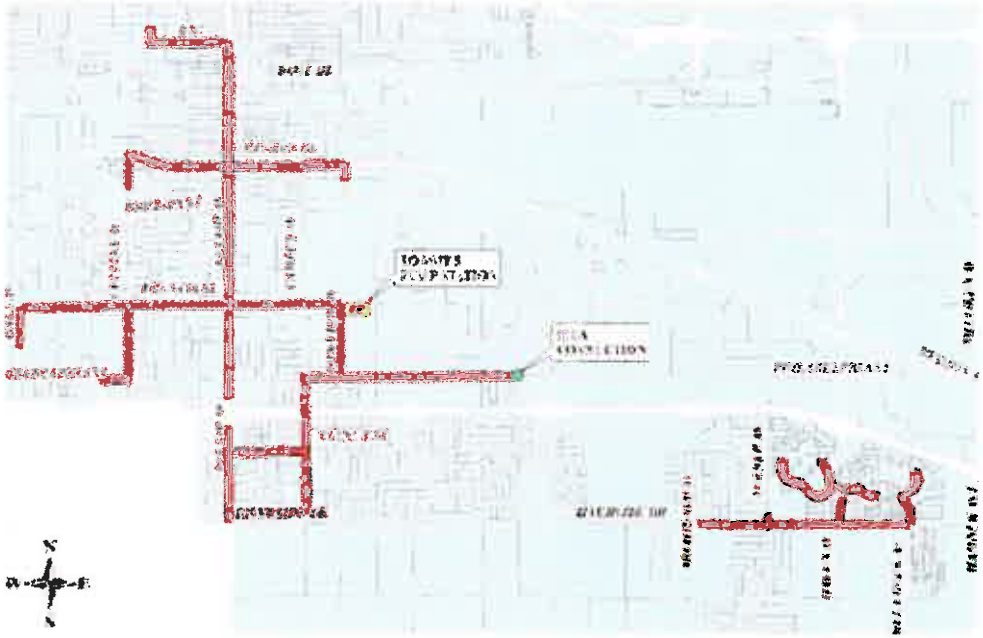
- City of Ontario's Euclid Avenue/Riverside Drive RW Distribution System Project was included in IEUA's 2015 Grant/SRF Loan Application to SWRCB

Project #	Project Name	Cost	AFY	Estimated Contract Date	Prop 1 Grant	SRF loan
8105-110	Napa Lateral	$ 5,824,770	500	Dec-16	$ 2,038,670	$ 3,786,101
8105-120	San Sevaine Basin Improvements	$ 7,525,603	1,500	Dec-16	$ 2,633,961	$ 4,891,642
8105-130	RP-1-1158 Recycled Water Pump Station Upgrades	$ 4,659,816	2,361	Feb-17	$ 1,630,936	$ 3,028,881
8105-140	RP-5 Recycled Water Pipeline Bottleneck	$ 1,514,440	-	Feb-17	$ 530,054	$ 984,386
8105-150	Recycled Water Pressure Sustaining Valve Installation	$ 990,211	-	Feb-17	$ 346,574	$ 643,637
8105-160	RP-1 Parallel Outfall Pipeline	$ 6,640,238	500	Feb-17	$ 2,324,083	$ 4,316,155
8105-170	Baseline Extension Project (Village of Heritage)	$ 4,077,339	105	Feb-17	$ 1,427,069	$ 2,650,271
8105-180	City of Ontario Euclid/Riverside RW Distribution System Project	$ 22,639,081	476	Mar-17	$ 7,923,678	$ 14,715,403
8105	**IEUA - Ontario Sub Total**	**$ 53,871,500**	**5,442**		**$ 18,855,025**	**$ 35,016,475**
8167	**IEUA - JCSD**	**$ 52,460,000**	**3,000**	**Mar-17**	**$ 15,000,000**	**$ 37,460,000**
8170	**IEUA-Pomona-MVWD**	**$ 51,896,000**	**1,100**	**May-17**	**$ 15,000,000**	**$ 36,896,000**
	Total	**$158,227,500**	**9,542**		**$ 48,855,025**	**$ 109,372,475**

Ontario RW Distribution System Project

- City's Euclid Avenue/Riverside Drive RW Distribution System Project will connect to IEUA Regional RW Distribution System

  - 18 miles of RW pipeline
  - 2 pump stations
  - 476 AFY RW Water
  - $22.6M Estimated cost



CEQA-Responsible Agency

- IEUA is required by the SWRCB to adopt a resolution as the CEQA-Responsible Agency for Grant/SRF loan Application Purpose

- On September 6, 2016, the City Council adopted the CEQA Initial Study/Mitigated Negative Declaration for the proposed RW Distribution System Project

CEQA-Lead Agency

- The City of Ontario is the CEQA-Lead agency for the environmental Compliance in the planning, design, and construction of the City's RW Distribution System Project

- Mitigation measures will be implemented by the City through a Mitigation Monitoring and Reporting Program to address environmental factors:

Aesthetics	Traffic/Transportation	Cultural Resources	Hazardous Materials
Air Quality	Geology and Soils	Hydrology & Water Quality	Noise

Recommendation

- Adopt Resolution 2016-9-2 approving and adopting CEQA documents as the CEQA-Responsible Agency for the City's RW System Project for Grant and SRF Loan application

- Authorize the General Manager to file the Notice of Determination (NOD) with the San Bernardino County Clerk of the Board

Public, Legislative Affairs, and Water Resources Committee

ACTION ITEM 1C

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Date:	September 21, 2016
To:	The Honorable Board of Directors
Through:	Public, Legislative Affairs, and Water Resources Committee (*09/14/16*)
From:	P. Joseph Grindstaff General Manager
Submitted by:	Chris Berch Executive Manager of Engineering/Assistant General Manager Sylvie Lee Manager of Planning and Environmental Resources
Subject:	CEQA Adoption – Fontana Water Company Recycled Water Improvement Project

RECOMMENDATION

It is recommended that the Board of Directors:

1. Adopt the California Environmental Quality Act (CEQA) Initial Study/Mitigated Negative Declaration for the Fontana Water Company Recycled Water Improvement Project; and

2. Authorize the General Manager to file the Notice of Determination (NOD) with the San Bernardino County Clerk of the Board.

BACKGROUND

In 2013, Inland Empire Utilities Agency (IEUA) agreed to serve as the lead CEQA agency for a recycled water improvement project initiated by San Gabriel Valley Water Company (SGVWC) through its subsidiary Fontana Water Company (FWC) division which is located within the Regional Plant No. 3 (RP-3) recharge basin facility and in the southern area of the city of Fontana. The project consists of the construction of a recycled water booster station, a half-million gallon reservoir, and delivery piping that will connect to the existing Wineville recycled water pipeline located in the east side of RP-3 and distribute recycled water to the FWC distribution system. An easement will be granted by IEUA to FWC for these proposed recycled water facilities including an area reserved for a future half-million gallon reservoir. These facilities will allow FWC to deliver recycled water to its existing system in the southern area of Fontana.

Tom Dodson and Associates prepared the Initial Study/Mitigated Negative Declaration (IS/MND). The MND identified the mitigation measures that will be implemented during and after construction to reduce all potential significant impacts to less than significant levels. The prepared IS supports the determination. A 30-day public review of these documents was completed on May 18, 2016. The following state, county, and local agencies provided comments:

- State of California State Clearinghouse and Planning Unit
- South Coast Air Quality Management District
- San Bernardino County Department of Public Works

Each of the comments were noted, addressed, and incorporated into the final IS/MND documents. In June 2016, the site plan was revised and the IS/MND was updated to reflect the change. A 30-day public review was completed in August 2016. These final documents require board adoption and the issuance of a NOD for state filing.

Adopting the recommended CEQA findings and mitigation measures for the Fontana Water Company Recycled Water Improvement Project is consistent with the IEUA business goal of *Water Reliability* by maximizing the beneficial reuse of recycled water and sources of groundwater within the Chino Basin.

PRIOR BOARD ACTION

None.

IMPACT ON BUDGET

None.

CEQA Adoption
Fontana Water Company
Recycled Water Improvement Project
September 2016

Liza Muñoz, P.E.
Senior Engineer

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

IEUA Board of Directors Meeting
September 2016

Project Request

- The adoption of the CEQA Initial Study/Mitigated Negative Declaration for the proposed Fontana Water Company Recycled Water Improvement Project

Project Timeline

2013

IEUA agreed to serve as the CEQA lead agency for SGVWC/FWC.

February-March 2016

SGVWC/FWC prepared site map of proposed facilities. IS/MND was prepared.

April 2016

Initiated 30-day public review for IS/MND

May 2016

Comments were received and addressed.

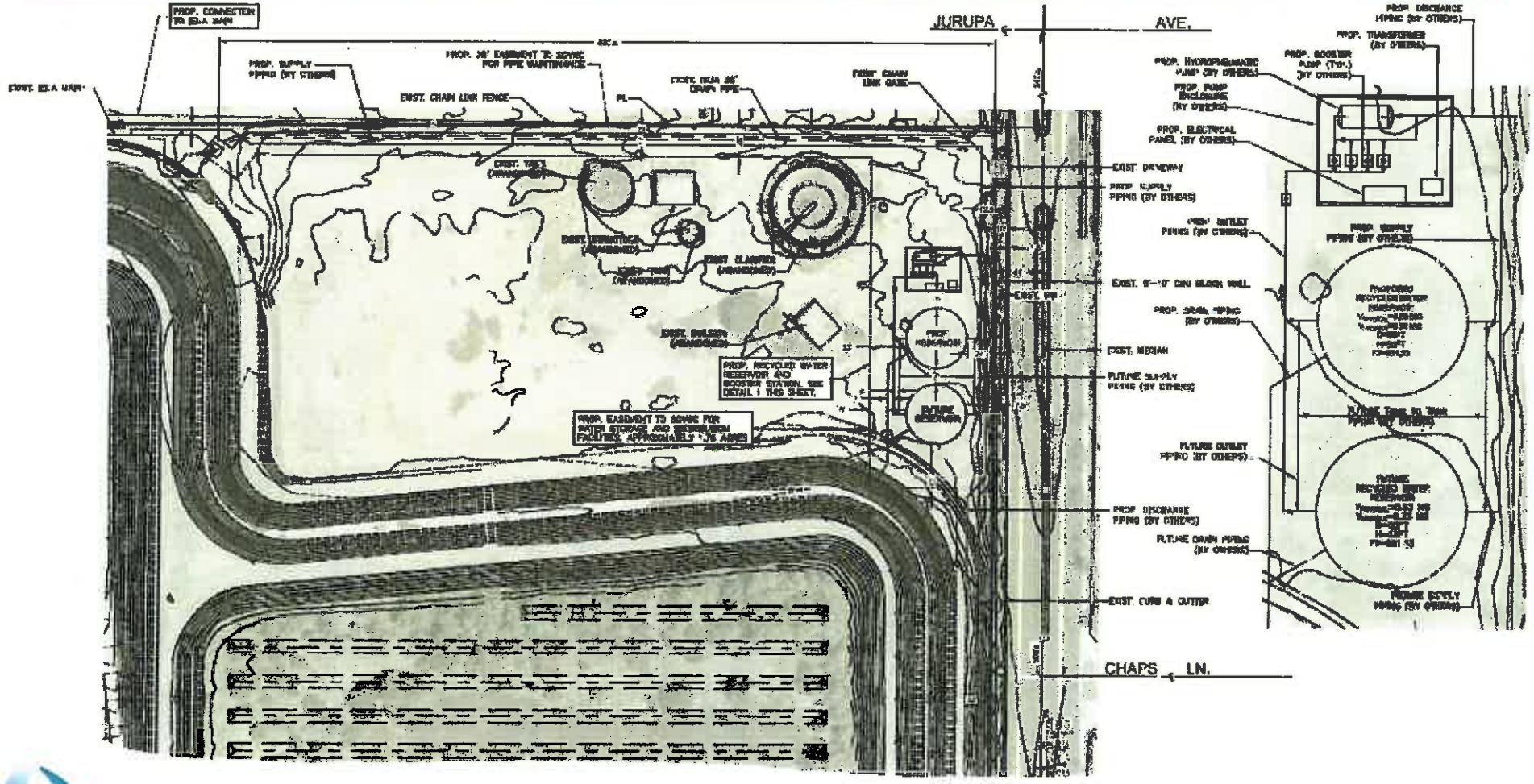
June 2016

SGVWC/FWC revised the site map and IS/MND was updated.

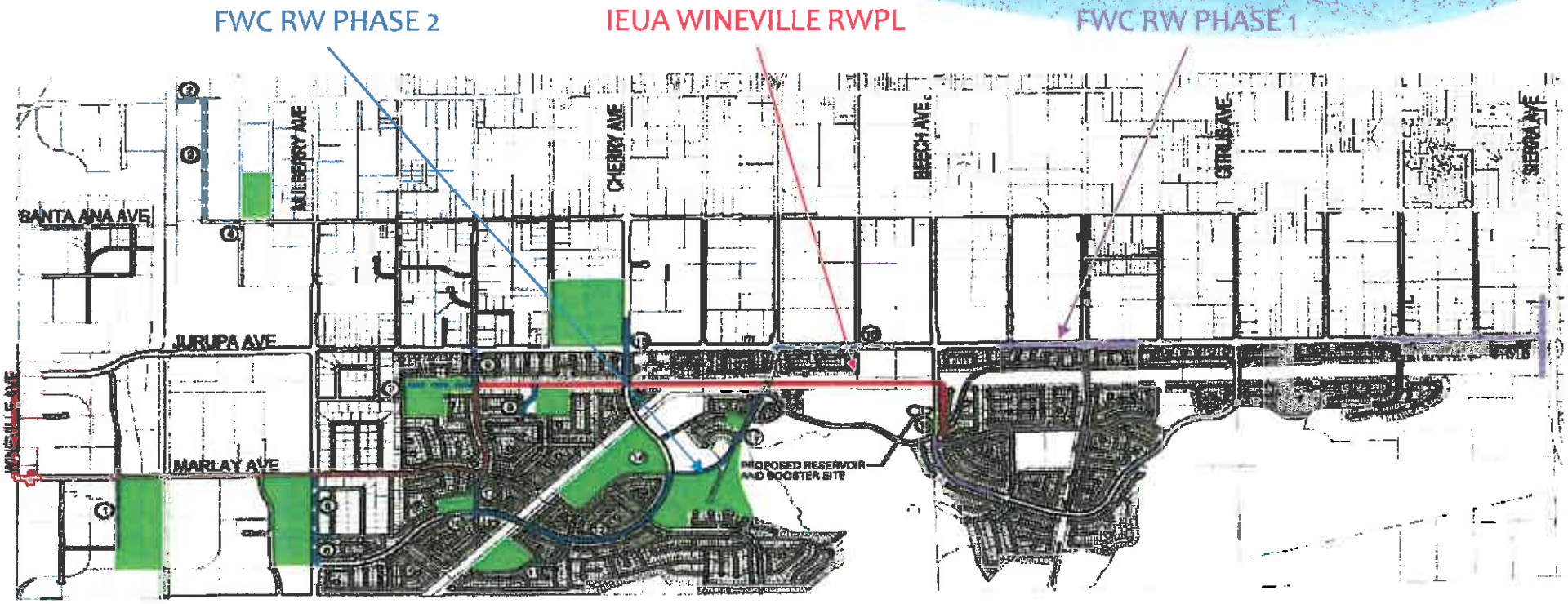
August 2016

Recirculated revised IS/MND for 30 days

Project Scope in RP-3



Project Scope in Fontana



Environmental Findings

- Mitigated Negative Declaration (MND) is the appropriate environmental determination
- Initial Study (IS) states the findings and supports the determination
- Mitigation measures will be implemented through a Mitigation Monitoring and Reporting Program (MMRP) to address environmental factors:

Aesthetics	Transportation/Traffic	Cultural Resources	Hazards & Hazardous Materials
Air Quality	Geology/Soils	Hydrology & Water Quality	Noise

Recommendation

Staff recommends that the Board of Directors approve the adoption of CEQA Initial Study/Mitigated Negative Declaration and Mitigation, Monitoring, and Reporting Program for the Fontana Water Company Recycled Water Improvement Project, and authorize the General Manager to file the Notice of Determination (NOD) with the San Bernardino County Clerk of the Board.

Adopting the recommended CEQA findings and mitigation measures is consistent with the ***Agency's Business Goal of Water Reliability*** by maximizing the beneficial reuse of recycled water and sources of groundwater within the Chino Basin.

ACTION ITEM 1D

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Date:	September 21, 2016
To:	The Honorable Board of Directors
Through:	Public, Legislative Affairs, and Water Resources Committee (*09/14/16*)
From:	P. Joseph Grindstaff General Manager
Submitted by:	Chris Berch Executive Manager of Engineering/Assistant General Manager
	Sylvie Lee Manager of Planning and Environmental Resources
Subject:	Appointment of IEUA Alternate to PA 23 Committee

RECOMMENDATION

It is recommended that the Board of Directors approve the appointment of IEUA's Santa Ana Watershed Project Authority (SAWPA) Commissioner to serve as the alternate committee member to the PA 23 Committee.

BACKGROUND

Project Agreement 23 (PA 23) was established by the SAWPA member agencies to govern water banking elements of the Santa Ana River Conservation and Conjunctive Use Program (SARCCUP). Parties to PA 23 are SAWPA and its five member agencies. PA 23 established a committee, with each member agency having one representative on the committee. Through SARCCUP, the PA 23 parties desire to improve storage and dry year yield resiliency of the watershed by conjunctive operation of its groundwater basins with available imported water. The PA 23 Committee will implement measures pursuant to a $55-million Proposition 84 grant, and may implement other measures consistent with the purpose of SARCCUP. PA 23 has no expiration date.

General Manager P. Joseph Grindstaff currently serves as a committee member representing IEUA. Staff recommends that the Board appoint IEUA's Santa Ana Watershed Project Authority (SAWPA) Commissioner to serve as Mr. Grindstaff's alternate.

PRIOR BOARD ACTION

At its meeting on June 15, 2016, the Board approved the formation of PA 23 and the appointment of the IEUA General Manager as the agency's representative to the committee.

IMPACT ON BUDGET

None.

Public, Legislative Affairs, and Water Resources Committee

ACTION ITEM 1E

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Date:	September 21, 2016
To:	The Honorable Board of Directors
Through:	Public, Legislative Affairs, and Water Resources Committee (*09/14/16*)
From:	P. Joseph Grindstaff General Manager
Submitted by:	Chris Berch Executive Manager of Engineering/Assistant General Manager
	Sylvie Lee Manager of Planning and Environmental Resources
Subject:	2016 Prado Basin Adaptive Management Plan

RECOMMENDATION

It is recommended that the Board of Directors approve the proposed cost share for the ongoing O&M of the Prado Adaptive Management Plan.

BACKGROUND

In December 2010, the Inland Empire Utilities Agency (IEUA) approved the Peace II Subsequent Environmental Impact Report (SEIR). The Peace II SEIR was collaboratively completed by IEUA and Chino Basin Watermaster (CBWM) and laid the foundation for the implementation of hydraulic control, reoperation of the Chino Basin and continued use of recycled water. The SEIR required IEUA, CBWM, Orange County Water District (OCWD) and individual stakeholders that choose to participate, to convene a Prado Basin Habitat Sustainability Committee (Committee) to oversee, develop and implement the Prado Basin Habitat Sustainability Program (PBHSP).

The PBHSP was committed to ensuring that the Prado Basin riparian habitat will not incur unforeseeable significant adverse effects due to implementation of the Peace II Agreement (CBWM, 2007). To address the potential groundwater level drawdown and its impact on riparian vegetation, the monitoring and mitigation requirements in the SEIR (Biological Resources/Land Use & Planning— Section 4.4-3) required the Committee to develop and implement an Adaptive Management Plan (AMP). Under the supervision of the Committee, the AMP was completed and finalized in May 2016. The AMP is included as an attachment.

On April 20, 2016, the IEUA Board of Directors approved an amendment to the IEUA/CBWM reimbursement agreement in the amount of not-to-exceed $934,500. Upon further discussion with CBWM, various line item costs were adjusted as summarized below. These changes reduced the total cost for the PBHSP from $934,500 to $770,000. Both Agencies worked together to revise the April 20, 2016 reimbursement agreement. The reduced cost identified above only includes costs incurred to establish the program monitoring and reporting regime, referred to as Start Up Costs in the agreement. The revised agreement is included as an attachment.

- Staff time from CBWM's consultant, Wildermuth Environmental Inc., was reduced to account for costs that might have otherwise been spent as CBWM staff time.
- Future ongoing costs associated with vegetation surveys and license fees were removed and reassigned to the budget associated with the annual monitoring reports.

Part of the requirements of the Prado AMP is to develop an initial annual report that establishes the baseline including historical data. After the initial report, parameters for monitoring and frequency will be established on an annual basis by the Committee. The AMP will develop annual reports that will include recommendations for monitoring and alternative water management activities. The recommendations from each annual report will adjust and adapt based on observed data. Throughout the term of the PBHSP, staff will bring forward each annual report to the CBWM and IEUA Board of Directors for consideration.

Program costs that are ongoing (Ongoing Costs) are proposed to be cost-shared between Watermaster and IEUA on a 50/50 basis with the exception of efforts associated with groundwater level, groundwater quality and surface water monitoring, which are addressed in the 2008 Bright Line Agreement as 100% CBWM responsibility. These Ongoing Costs were not made part of the April 2016 agreement and have now been included to clarify cost sharing for future monitoring expenses. Ongoing Costs would be in addition to the Start Up Cost of $770,000 and will include the following activities:

- Ongoing Costs are defined as the costs associated with the following Program activities:
    1. A Riparian Habitat Monitoring Program:
        i. Site-specific vegetation monitoring program with the United States Bureau of Reclamation and OCWD
        ii. Custom flight to collect high-resolution air photo of the Prado Basin Region
        iii. Historical air photos and vegetation survey data in the Prado Basin Region
        iv. Historical Landsat data in the Prado Basin region
    2. Climate Monitoring Program to collect data on an annual basis
    3. Preparation of the AMP Annual Report:
        i. Water level monitoring, vegetation survey, photo monitoring, Landsat data, climate data and analysis of the components
        ii. Prepare the Annual Report
    4. Annual license fees for monitoring wells
- The first year total expense to be cost shared is approximately $400,000, with IEUA's share being $150,000.

- The projected future years is estimated at $150,000, with each agency's share of $75,000.

The Peace II SEIR does not explicitly state a duration for the monitoring and mitigation program. It is logical to assume that the program will last until the drawdown impacts, if any, on the riparian habitat from Peace II activities are fully manifested and not predicted to worsen, and that mitigation measures, if any are required, are fully implemented. Upon the termination of the monitoring and any necessary mitigation obligations, the parties may elect to terminate the cost share agreement.

The cost share agreement and the Prado AMP were approved by the CBWM Board in August 2016.

The PBHS Program is consistent with the *Agency's Business Goal of Water Reliability* by maximizing the beneficial reuse of recycled water and sources of groundwater within the Chino Basin.

PRIOR BOARD ACTION

On April 20, 2016, the IEUA Board of Directors approved an amendment to the IEUA/CBWM reimbursement agreement in the amount of not-to-exceed $934,500.

On August 21, 2013, the IEUA Board of Directors awarded the contract for installation of the groundwater monitoring wells and approved an amendment to IEUA/CBWM reimbursement agreement in the amount of not-to-exceed $600,000.

On October 17, 2012, the IEUA Board of Directors approved an MOU with the United States Bureau of Reclamation and the CBWM for the Prado Basin Habitat Sustainability Program to perform the vegetation surveys.

On October 3, 2012, the IEUA Board of Directors approved the reimbursement agreement in the amount of $440,000 with CBWM for the Prado Basin Habitat Sustainability Program.

On October 6, 2010, the IEUA Board of Directors approved the Peace II SEIR.

IMPACT ON BUDGET

IEUA's cost share for the first Annual Report for the Prado AMP is included in the RW Fund, WR13022 FY 16/17 budget of $334,711.

Attachments: 2016 Prado Basin Adaptive Management Plan
Cost-Share Agreement

IEUA Contract No.: **4600001511-002**
Watermaster Contract No.:

AGREEMENT BETWEEN CHINO BASIN WATERMASTER AND INLAND EMPIRE UTILITIES AGENCY REGARDING REIMBURSEMENT OF THE PEACE II SUBSEQUENT ENVIRONMENTAL IMPACT REPORT MITIGATION MEASURE 4.4.3 (PRADO BASIN HABITAT SUSTAINABILITY PROGRAM)

THIS AMENDMENT NUMBER 2, to Contract Number 4600001511, between the Chino Basin Watermaster (**Watermaster**) and the Inland Empire Utilities Agency (**IEUA**) shall revise the Agreement as follows:

REVISE SECTION 3, TO READ AS FOLLOWS:

Program costs will be shared between the Watermaster and IEUA as indicated below and in Attachments A and B.

a) Costs that are incurred to establish the Program monitoring and reporting regime (**Start Up Costs**) will be cost-shared between Watermaster and IEUA on a 50/50 basis, subject to the following limitation: Watermaster and IEUA will contribute up to a combined total of $770,000 in **Start Up Costs**. These **Start Up Costs** are costs associated with tasks that have already completed. Refer to Attachment A and B for additional details on these costs. For the purposes of this agreement, **Start Up Costs** are defined as the costs associated with the following Program activities:

    1. Development of the Adaptive Management Plan (**AMP**); and,

    2. Installation of monitoring wells, including project management, construction, contract labor, environmental and regulatory permitting, acquisition of required easements and licenses, and contingency costs

b) Program costs that are ongoing (**Ongoing Costs**) will be cost-shared between Watermaster and IEUA, split on a 50/50 basis, subject to the following limitation: in each fiscal year, neither Watermaster nor IEUA shall be obligated to reimburse the other for **Ongoing Costs** that exceed the amount that the reimbursing party has budgeted for **Ongoing Costs** in that fiscal year, except as agreed upon by both parties in writing or as amended during the fiscal year. The first year expense to be cost shared is approximately $300,000, with projected future years estimated at approximately $150,000. For the purposes of this agreement, **Ongoing Costs** are defined as the costs associated with the following Program activities:

    1. A Riparian Habitat Monitoring Program, including, but not limited to, the following sub-tasks:
        i. Design and implement a site-specific vegetation monitoring program with the United States Bureau of Reclamation (**USBR**) and Orange County Water District, pursuant to which USBR will perform site-specific vegetation surveys.
        ii. Manage and perform custom flight to collect a high-resolution air photo of the Prado Basin Region

iii. Collect, check and upload historical air photos and vegetation survey data in the Prado Basin region
iv. Collect, check, and upload historical Landsat data in the Prado Basin region

2. A Climate Monitoring Program, including, but not limited to, the following sub-task:
    i. Collect, check, and upload climatic data on an annual basis

3. Preparation of the AMP Annual Report (**Annual Report**), including, but not limited to, the following sub-tasks:

    i. Water level monitoring, vegetation survey, photo monitoring, landsat data, climate data and analysis of the components.
    ii. Analyze data and prepare an administrative draft of the Annual Report for Watermaster/IEUA
    iii. Incorporate Watermaster and IEUA comments and prepare a draft Annual Report for review by the PBHSC
    iv. Meet with PBHSC to review draft Annual Report
    v. Incorporate PBHSC comments and finalize the Annual Report

4. Annual license fees for monitoring wells

5. Project management and administration activities associated with the Program undertaken by a Party's consultant, including, but not limited to, the following sub-tasks:
    i. Ad-Hoc Meetings
    ii. Preparation of scope and budget for the Program
    iii. Project administration and financial reporting

6. Other costs required to fulfill the requirements of Peace II Subsequent EIR mitigation measure 4.4-3

c) Watermaster shall be responsible for the costs associated with the Groundwater Level Monitoring Program, Groundwater Quality Monitoring Program, and Surface Water Monitoring Program.

d) Watermaster and IEUA shall each have responsibility for its own administrative costs, excluding the tasks and expenses included under **Set-Up Costs** and **Ongoing Costs**.

e) Watermaster and IEUA will meet to review the cost-sharing structure under this agreement and negotiate any necessary adjustments in good faith on at least an annual basis.

f) The Peace II SEIR does not explicitly state a duration for the monitoring and mitigation program. It is logical to assume that the program will last until the drawdown impacts, if any, on the riparian habitat from Peace II activities are fully manifested and not predicted to worsen, and that mitigation measures, if any are required, are fully implemented. This is not a perpetual agreement. Upon the termination of the monitoring and any necessary mitigation obligations, the parties may elect to terminate the cost share agreement.

ALL OTHER PROVISIONS OF THIS CONTRACT REMAIN UNCHANGED.

The parties hereto have mutually covenanted and agreed as per the above amendment item(s), and in doing so have caused this document to become incorporated into the Contract documents.

INLAND EMPIRE UTILITIES AGENCY:
(*A MUNICIPAL WATER DISTRICT)

P. Joseph Grindstaff (Date)
General Manager

CHINO BASIN WATERMASTER:

Peter Kavounas (Date)
General Manager

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2016 Adaptive Management Plan
for the
Prado Basin Habitat Sustainability Program

May 31, 2016

Prepared for:

Inland Empire Utilities Agency
&
Chino Basin Watermaster

Prepared by:

Wildermuth Environmental, Inc.

Table of Contents

List of Figures

Acronyms, Abbreviations, and Initialisms

acre-ft/yr	acre-feet per year
AMP	Adaptive Management Plan
CBWM	Chino Basin Watermaster
IEUA	Inland Empire Utilities Agency
OBMP	Optimum Basin Management Plan
OCWD	Orange County Water District
PBHSC	Prado Basin Habitat Sustainability Committee
PBHSP	Prado Basin Habitat Sustainability Program
POTWs	Publically owned treatment works
SAR	Santa Ana River
SEIR	Subsequent Environmental Impact Report
TDS	Total Dissolved Solids
WEI	Wildermuth Environmental Inc.
MWDSC	Metropolitan Water District of Southern California

Pursuant to the monitoring and mitigation requirements of the Peace II Subsequent Environmental Impact Report (SEIR) (Tom Dodson, 2010), the Inland Empire Utilities Agency (IEUA) and the Chino Basin Watermaster (Watermaster) convened the Prado Basin Habitat Sustainability Committee (PBHSC) to develop the Prado Basin Habitat Sustainability Program (PBHSP). The PBHSP is an adaptive management program to ensure that the Prado Flood Control Basin (Prado Basin) riparian habitat will not incur unforeseeable significant adverse effects due to implementation of the Peace II Agreement (CBWM, 2007). The Adaptive Management Plan (AMP) described herein was developed to describe the PBHSP and facilitate its implementation.

1.1 Environmental Setting – Chino Basin and Prado Basin

Figure 1-1 shows the location of the Chino Basin in western Riverside and southwestern San Bernardino Counties within the central portion of the Santa Ana River Watershed. The Chino Basin is a large alluvial groundwater basin with storage in excess of five million acre-feet.

Figure 1-1 also shows the principal surface-water features that overlie the Chino Basin, including the Santa Ana River (SAR) and its tributaries to Prado Dam. The main tributaries that flow into the Prado Basin include the San Antonio/Chino Creeks, Cucamonga/Mill Creeks, and Temescal Creek that drains the Temescal Valley from the south. Flow within the middle SAR and its tributaries discharge into and through the Prado Basin behind Prado Dam, the main flood-control facility on the middle SAR. The US Army Corps of Engineers, in coordination with the Orange County Water District (OCWD), regulates releases from Prado Dam for the purposes of flood control and groundwater recharge in Orange County. The major components of flow within the SAR and its tributaries are: runoff from precipitation, discharge of tertiary-treated effluent from wastewater treatment plants, rising groundwater, discharge of untreated imported water for groundwater recharge, and other dry-weather runoff.

Figure 1-2 shows that the SAR and its tributaries are unlined across the Prado Basin, which allows for groundwater/surface-water interaction. Groundwater in Chino Basin generally flows from the forebay regions in the north towards Prado Basin in the south. Figure 1-3 shows that depth to groundwater is relatively shallow in the Prado Basin area, where groundwater losses can occur via evapotranspiration by riparian vegetation and rising-groundwater outflow to the SAR and its tributaries. Groundwater-modeling studies of Chino Basin have estimated that in 2011 groundwater losses were about 36,000 acre-ft/yr, with 18,000 acre-ft/yr lost to evapotranspiration and about 18,000 acre-ft/yr lost to rising-groundwater outflow (WEI, 2014). Most of these groundwater losses from Chino Basin occur in the Prado Basin area.

1.2 Chino Basin Judgment, OBMP, and Peace Agreement

A 1978 Judgment entered in the Superior Court of the State of California for the County of San Bernardino (Chino Basin Municipal Water District *v.* City of Chino et al.) established

pumping and storage rights in the Chino Basin. The Judgment established the Watermaster to oversee the implementation of the Judgment, and provided Watermaster with the discretionary authority to develop an Optimum Basin Management Plan (OBMP) to maximize the beneficial use of the Basin. The OBMP was developed by Watermaster and the parties to the Judgment in the late 1990s (WEI, 1999). The OBMP mapped a strategy to provide for enhanced yield of the Chino Basin and reliable water supplies for the development that was expected to occur. The goals of the OBMP are: to enhance basin water supplies, to protect and enhance water quality, to enhance the management of the Basin, and to equitably finance the OBMP.

In 2000, the Chino Basin parties executed the so-called Peace Agreement (CBWM, 2000), which codified the Parties' intent to implement the OBMP. The Peace Agreement included an OBMP Implementation Plan, which outlined the time frames for implementing tasks and projects in accordance with the Peace Agreement and OBMP. The OBMP Implementation Plan is a comprehensive, long-range water-management plan for the Chino Basin and includes: the use of recycled water for direct reuse and artificial recharge, the capture of increased quantities of high-quality storm-water runoff, the recharge of imported water when total dissolved solids (TDS) concentrations are low, the desalting of poor-quality groundwater, the support of regulatory efforts to improve water quality in the Basin, and the implementation of management activities that will result in the reduced outflow of high-TDS/high-nitrate groundwater to the SAR, thus ensuring the protection of downstream beneficial uses in Orange County.

The IEUA, then named the Chino Basin Municipal Water District, is plaintiff in the legal action that resulted in the Judgment, and is the major regional wastewater treatment/recycling agency and wholesale supplemental-water supplier in the Chino Basin. For OBMP implementation, IEUA has served as the lead agency for compliance with the California Environmental Quality Act (CEQA). IEUA certified the Program Environmental Impact Report for the OBMP (SCH#2000041047) in July 2000 (Tom Dodson, 2000).

1.3 The Peace II Agreement and its Subsequent EIR

To further implement the goals and objectives of the OBMP, Watermaster executed the so-called Peace II Agreement in 2007, which modified the OBMP Implementation Plan (CBWM, 2007). The Peace II Agreement is an update and revision of the OBMP. In 2010, IEUA certified the Peace II SEIR (Tom Dodson, 2010) to address the potential significant adverse environmental impacts that could result from implementing the Peace II Agreement.

The Peace II SEIR describes the main activities of the Peace II Agreement:

> *Watermaster and the parties to the Judgment have been working to develop changes to the original Peace Agreement that, among other things, provide for Re-Operation and the attainment of hydraulic control for the Chino Groundwater Basin. "Hydraulic control" is defined as the reduction of groundwater discharge from the Chino North Management Zone to the Santa Ana River to de minimis quantities. Hydraulic control ensures that the water management activities in the Chino North Management Zone will not impair the beneficial*

> *uses designated for water quality of the Santa Ana River downstream of Prado Dam. "Re-Operation" means the increase in controlled overdraft of the Chino Basin, as defined in the Judgment, from 200,000 acre-ft over the period of 1978 through 2017 to 600,000 acre-ft through 2030. Both of these program components, hydraulic control through desalter expansion in the southwestern portion of the Chino Basin and Re-operation (controlled overdraft over the whole of the Chino Basin) are required to achieve hydraulic control, which is the primary objective of the Peace II Agreement. Hydraulic control would be achieved through expansion of the desalter program from its current approximate 27,000 acre feet per year (afy) of production to 40,000 afy, and additional groundwater extractions throughout the Basin to increase overdraft to 600,000 acre-feet (total cumulative overdraft) through 2030.*
>
> *The proposed project has two main features: the expansion of the desalter program such that the groundwater pumping for the desalters will reach 40,000 afy and that the pumping will occur in amounts and at locations (southwestern Chino Basin) that contribute to the achievement of hydraulic control; and the strategic reduction in groundwater storage (Re-Operation) by an additional 400,000 acre-feet (cumulative total overdraft of 600,000 through 2030) that, along with the expanded desalter program, substantially achieves hydraulic control for the Chino Groundwater Basin.*
>
> *Expansion of the desalter program would be accomplished with the installation and operation of a new well field, referred to as the Chino Creek Well Field (CCWF). The actual capacity of the CCWF will be determined during the design of the well field, but the available groundwater data estimates the capacity of this well field could range from about 5,000 acre-ft/yr to 7,700 acre-ft/yr [...].*

One of the potential impacts of the Peace II activities described above is the lowering of groundwater levels (drawdown) in the Prado Basin area, which may impact riparian vegetation that is dependent upon groundwater. Watermaster performed modeling studies to predict the extent and magnitude of the drawdown associated with the implementation of the Peace II Agreement. Figure 1-4 (Figure 4.4-10 from the Peace II SEIR) shows the model-predicted drawdown in the Prado Basin area for the period of 2005-2030. In general, the drawdown in the Prado Basin area was predicted to be less than five feet by 2030.

The production capacity of the final CCWF is approximately 1,500 acre-ft/yr. This is significantly less than the planned capacity of 5,000 to 7,700 acre-ft/yr assumed in the Peace II SEIR. Figure 1-5 shows more recent model results of predicted change in groundwater levels in the Prado Basin area for the period of 2011-2030 assuming a final CCWF production capacity of 1,500 acre-ft/yr (WEI, 2014). In this scenario, groundwater levels are predicted to rise in the Prado Basin area by up to five feet by 2030.

To address the potential drawdown and its impact on riparian vegetation, the monitoring and mitigation requirements in the Peace II SEIR (Biological Resources/Land Use & Planning—Section 4.4-3) call for the development and implementation of an adaptive management program for the Prado Basin habitat—the PBHSP:

The Chino Basin Stakeholders are committed to ensuring that the Peace II Agreement actions will not significantly adversely impact the Prado Basin riparian habitat. This includes the riparian portions of Chino and Mill Creek's between the terminus of hard lined channels and Prado Basin proper.

The available modeling data in the SEIR indicates that Peace II Agreement implementation will not cause significant adverse effects on the Prado Basin riparian habitat. However, the following contingency measure will be implemented to ensure that the Prado Basin riparian habitat will not incur unforeseeable significant adverse effects, due to implementation of Peace II. IEUA, Watermaster, OCWD and individual stakeholders, that choose to participate, will jointly fund and develop an adaptive management program that will include, but not be limited to:

- *monitoring riparian habitat quality and extent;*
- *investigating and identifying essential factors to long-term sustainability of Prado Basin riparian habitat;*
- *identification of specific parameters that can be monitored to measure potential effects of Peace II Agreement implementation effects on Prado Basin; and*
- *identification of water management options to minimize the Peace II Agreement effects on Prado Basin.*

This adaptive management program will be prepared as a contingency to define available management actions by Prado Basin stakeholders to address unforeseeable significant adverse impacts, as well as to contribute to the long-term sustainability of the Prado Basin riparian habitat.

The above effort will be implemented under the supervision of a newly-formed Prado Basin Habitat Sustainability Committee. This Committee will include representatives from all interested parties and will be convened by the Watermaster and IEUA. Annual reports will be prepared and will include recommendations for ongoing monitoring and any adaptive management actions required to mitigate any measured loss or prospective loss of riparian habitat that may be attributable to the Peace II Agreement. As determined by Watermaster and IEUA, significant adverse impacts to riparian habitat that are attributable to the Peace II Agreement will be mitigated.

1.4 Adaptive Management Plan for the PBHSP

Pursuant to the monitoring and mitigation requirements stated above, IEUA and Watermaster convened three meetings of the PBHSC to develop the PBHSP.

The PBHSP is an adaptive management program that will answer the following questions to satisfy the monitoring and mitigation requirements of the Peace II SEIR:

1. *What are the factors that potentially can affect the extent and quality of the riparian habitat?*
2. *What is a consistent, quantifiable definition of "riparian habitat quality," including metrics and measurement criteria?*
3. *What has been the historical extent and quality of the riparian habitat in the Prado Basin?*
4. *How has the extent and quality of the riparian habitat changed during implementation of Peace II?*
5. *How have groundwater levels and quality, surface-water discharge, weather, and climate changed over time? What were the causes of the changes? And, did those changes result in an adverse impact to riparian habitat in the Prado Basin?*
6. *Are there other factors besides groundwater levels, surface-water discharge, weather, and climate that affect riparian habitat in the Prado Basin? What are those factors? And, did they (or do they) result in an adverse impact to riparian habitat in the Prado Basin?*
7. *Are the factors that result in an adverse impact to riparian habitat in the Prado Basin related to Peace II implementation?*
8. *Are there areas of prospective loss of riparian habitat that may be attributable to the Peace II Agreement?*
9. *What are the potential mitigation actions that can be implemented if Peace II implementation results in an adverse impact to the riparian habitat?*

IEUA and Watermaster prepared this AMP to answer the questions above and to facilitate the implementation the PBHSP.

This AMP is organized into the following sections:

Section 1 – Background and Objectives. This section describes the historical context for the AMP and its objectives.

Section 2 – Monitoring Program for the PBHSP. This section outlines the PBHSP monitoring program, which includes the monitoring of riparian habitat, groundwater, surface water, weather, and climate. Because the PBHSP monitoring program may adjust from year to year, the detailed description of the 2016 monitoring program has been included herewith as Appendix A.

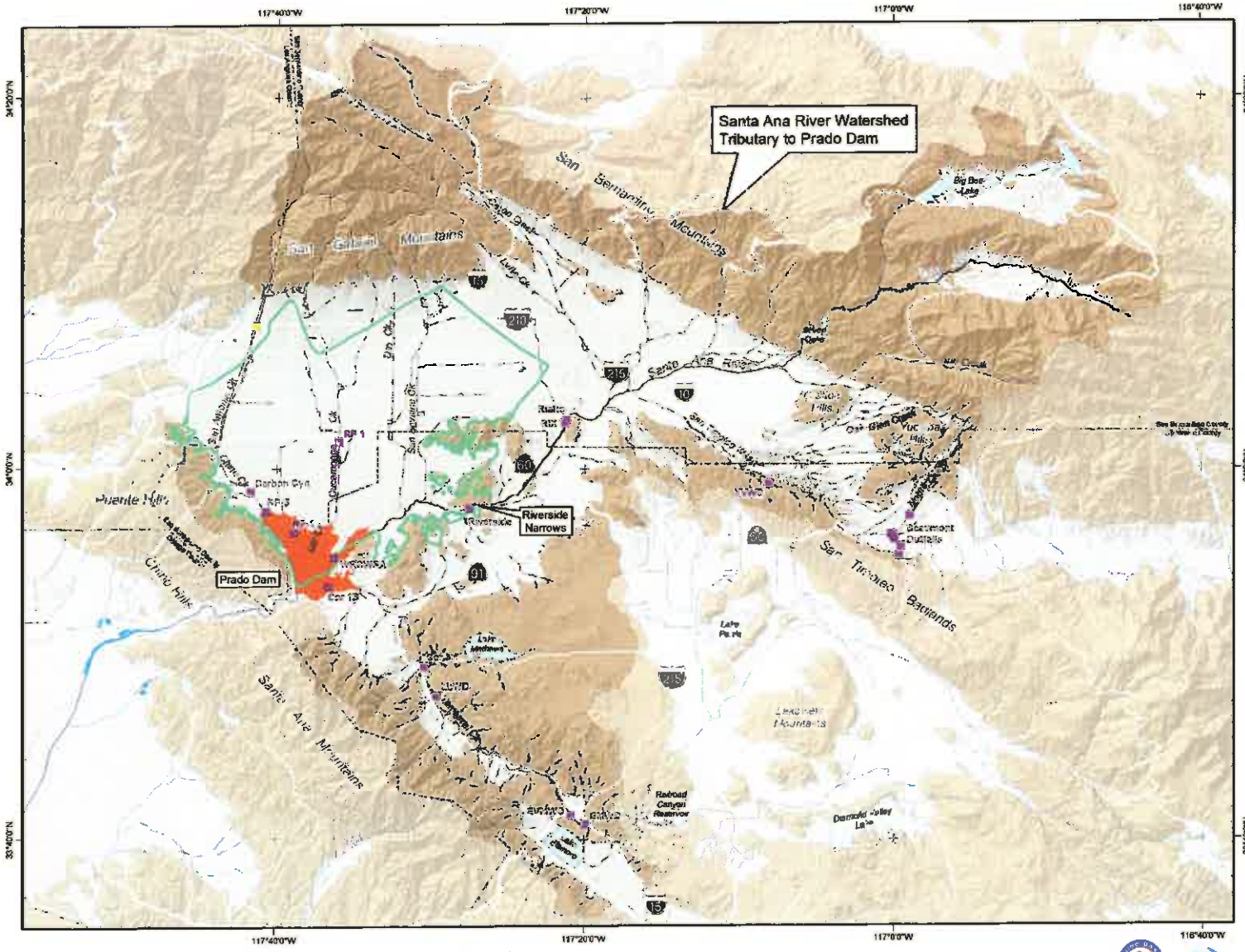
Section 3 – Predictive Groundwater Modeling. This section describes the needs and methods for predictive groundwater modeling to identify areas (if any) of prospective loss of riparian habitat due to the implementation of the Peace II Agreement.

Section 4 – Annual Reporting. This section describes the process for the annual review and analysis of the data generated from the PBHSP monitoring program and the annual reporting on results, interpretations, and recommendations.

Section 5 – Process to Revise the AMP. This section describes the process to revise the AMP in the future, if necessary.

Section 6 – Mitigation Measures. This section provides a list of potential strategies to mitigate adverse impacts to riparian habitat in Prado Basin in the event that such impacts are documented and attributed to the implementation of the Peace II Agreement.

Section 7 – References. This section lists the publications referenced within this document.



Prepared by:

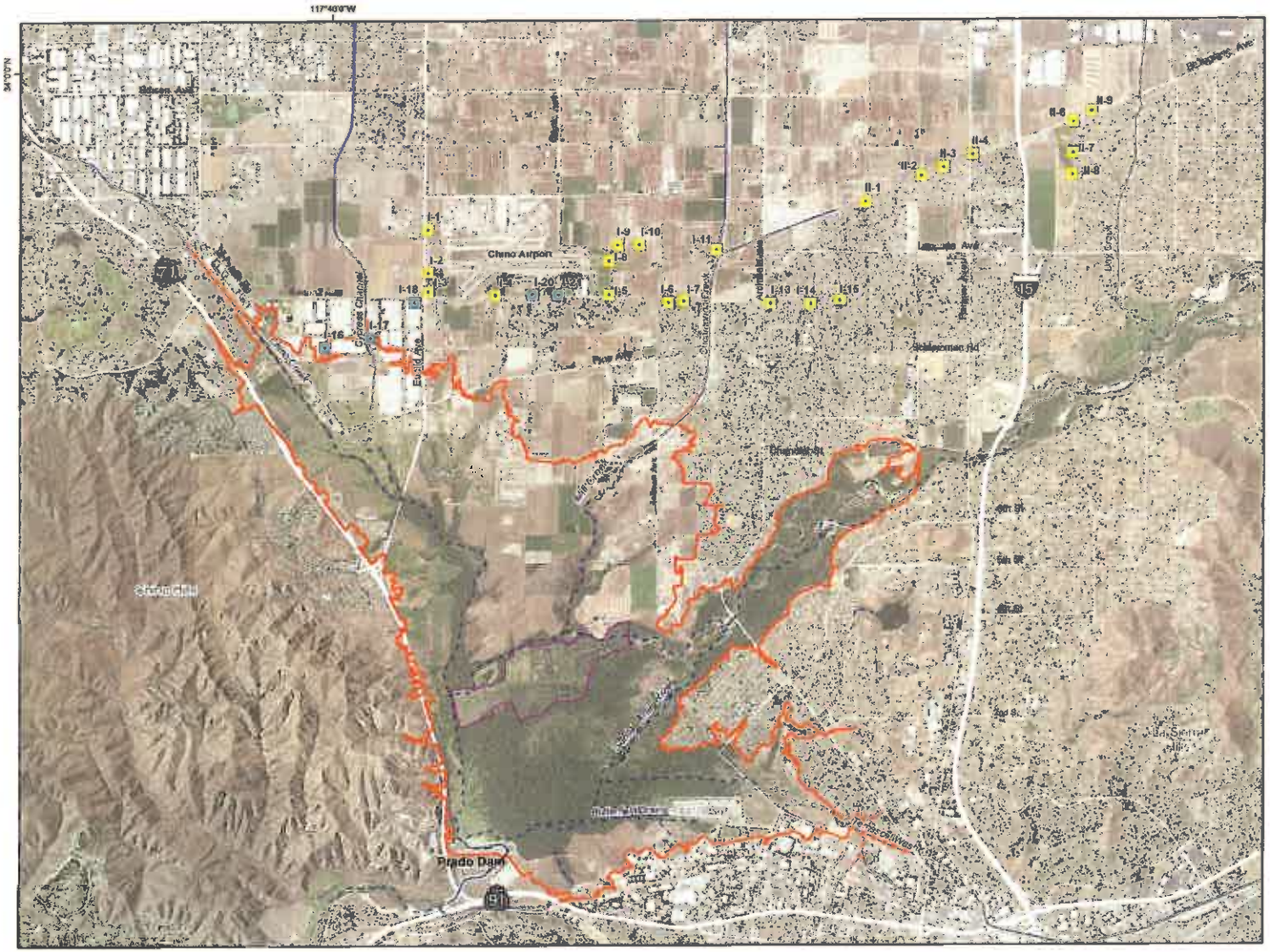
WEI
WILDERMUTH ENVIRONMENTAL, INC.

Author: TCR
Date: 1/28/2016
File: Figure 1-1_SARWtrsd

2016 PBHSP Adaptive Management Plan
Prado Basin Habitat Sustainability Committee

Santa Ana River Watershed Tributary to Prado Dam

Figure 1-1



Prado Flood Control Basin

Chino Basin Desalter Authority Well

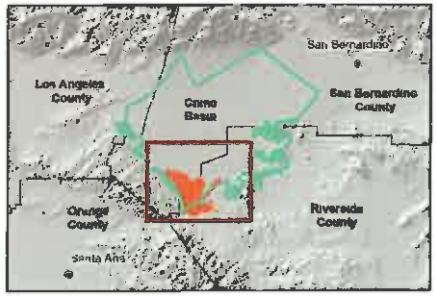
Chino Creek Well Field

OCWD Prado Wetlands

Concrete-Lined Channels

Unlined Rivers and Streams

Aerial Photo: USDA, 2014. Mosaic of photo from May 13, 2014 to June 3, 2014



Prepared by:

WEI
WILDERMUTH ENVIRONMENTAL, INC.

Author: TCR
Date: 1/28/2016
File: Figure 1-2_StudyArea

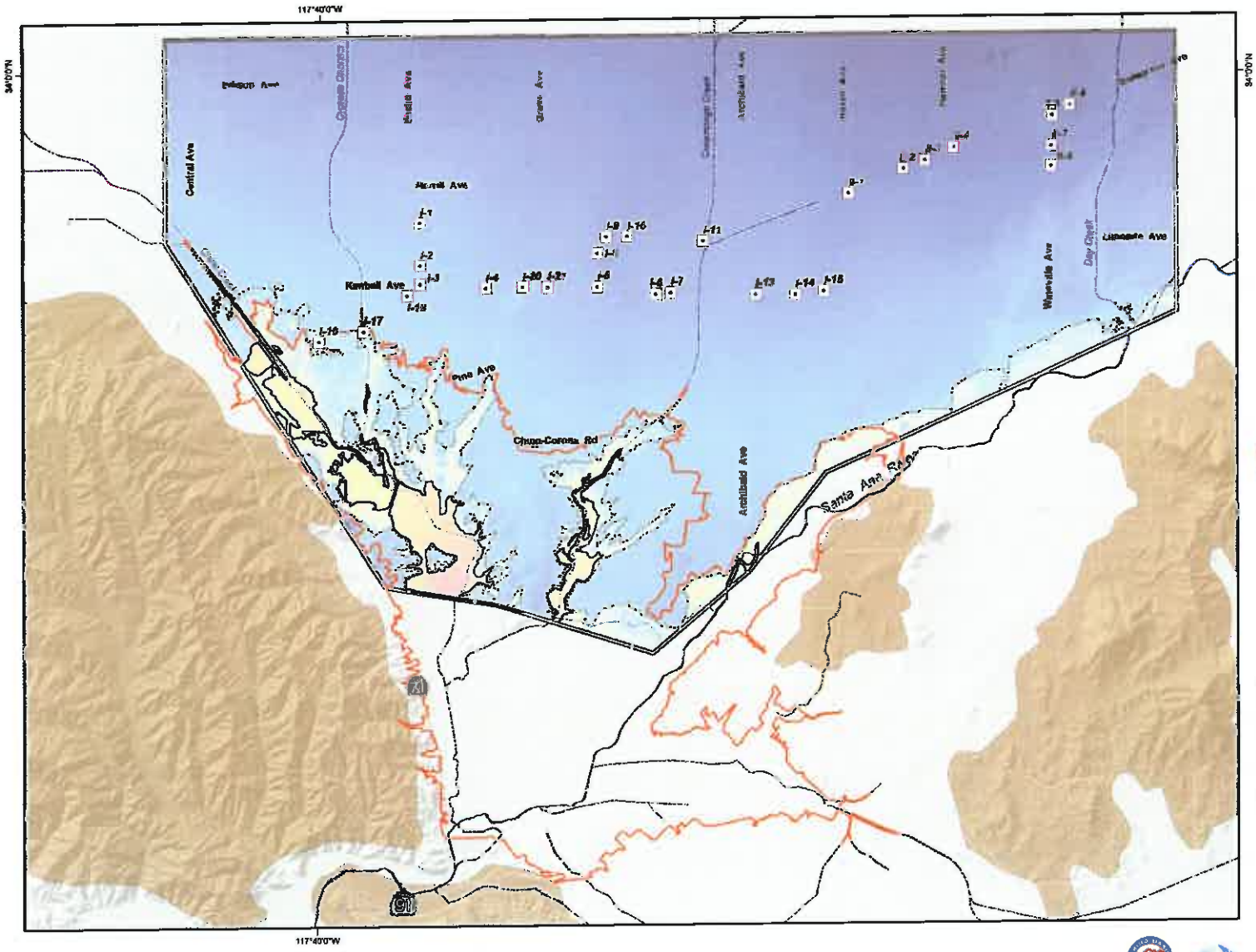
0 1 2 Miles

0 1 2 3 KM

2016 PBHSP Adaptive Managment Plan
Prado Basin Habitat Sustainability Committee

Prado Basin and the Chino Desalter Wells

Figure 1-2



Depth to Groundwater Spring 2011
(feet below ground surface)

-20 ft — Areas of rising groundwater
0
20
+20 ft
+200 ft

Extent of Groundwater Level Data Used in Mapping Depth to Groundwater

Chino Desalter Well

Streams & Flood Control Channels

Santa Ana River

Prado Flood Control Basin

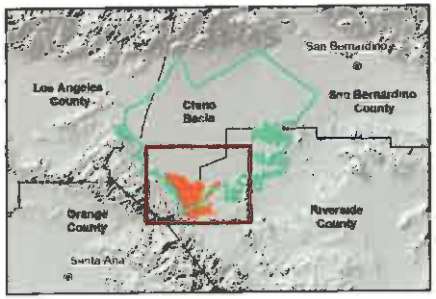
Geology

Water-Bearing Sediments

Quaternary Alluvium

Consolidated Bedrock

Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks



Prepared by:

WEI
WILDERMUTH ENVIRONMENTAL, INC.

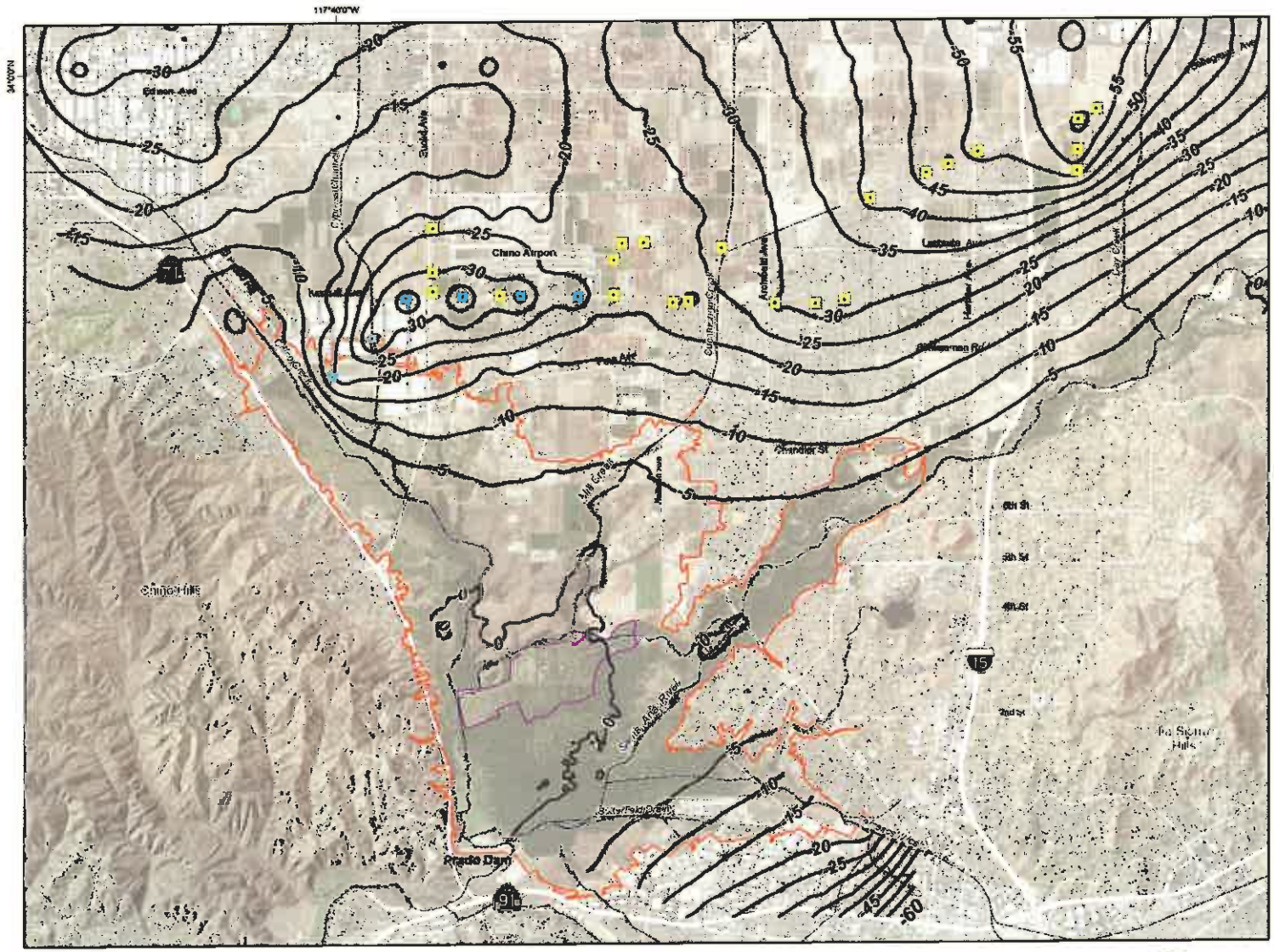
Author: TCR
Date: 1/28/2016
File: Figure 1-3_DTW

0 1 2 Miles
0 1 2 3 Km

2016 PBHSP Adaptive Managment Plan
Prado Basin Habitat Sustainability Committee

Depth to Groundwater for Spring 2011
Shallow Aquifer System

Figure 1-3



-40- Change in Groundwater Levels
FY2005 to 2030, feet

Prado Flood Control Basin

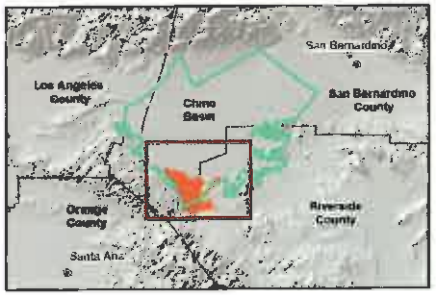
Chino Basin Desalter Authority Well

Chino Creek Well Field
(as modeled for the Peace II SEIR)

OCWD Prado Wetlands

Rivers and Streams

Aerial Photo: USDA, 2014. Mosaic of photo from May 13, 2014 to June 3, 2014



Prepared by:

WEI
WILDERMUTH ENVIRONMENTAL, INC.

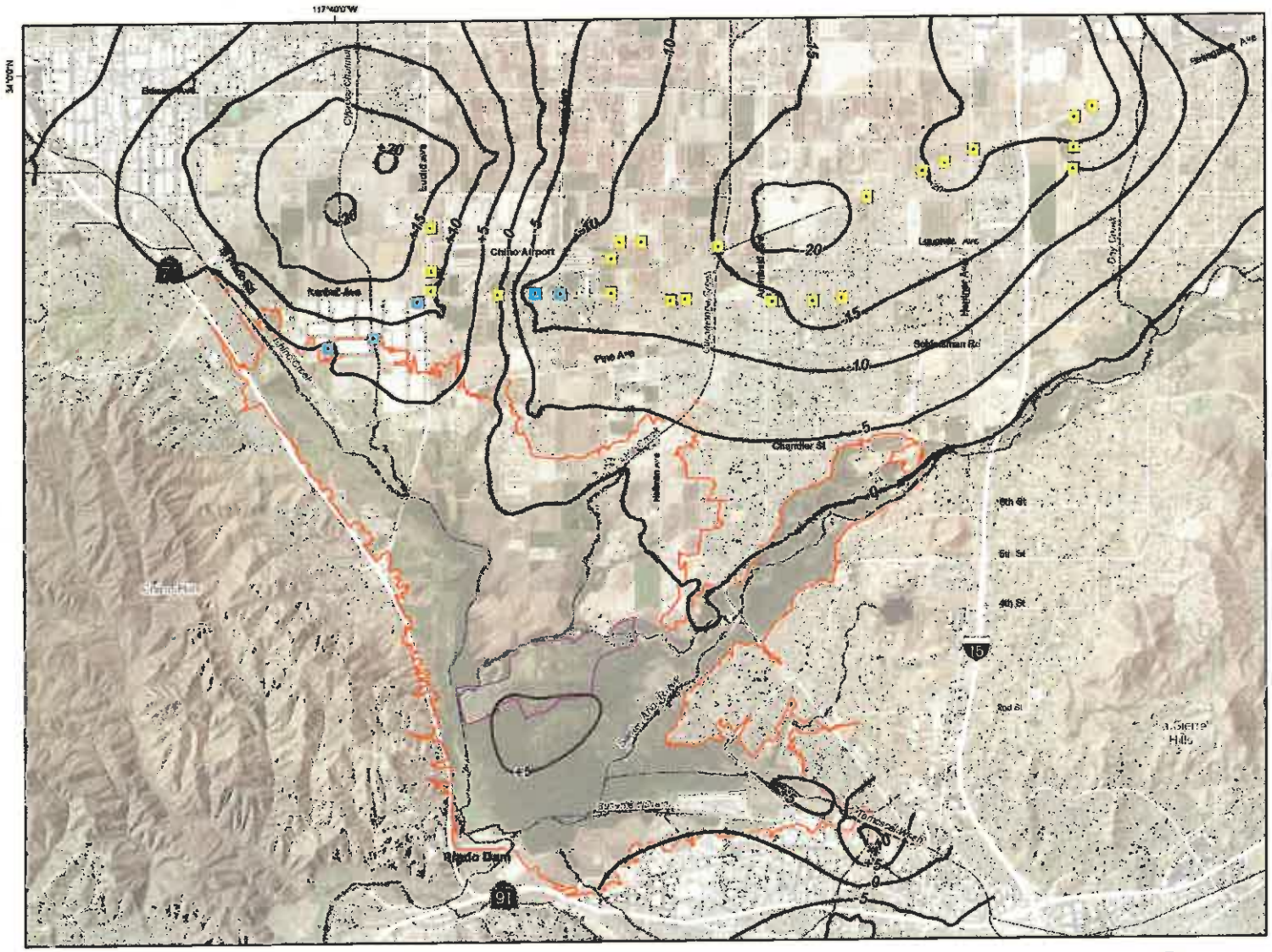
Author: TCR
Date: 4/28/2016
File: Figure 1-4_Peace II_slideshow

0 1 2 Miles
0 1 2 3 KM

2016 PBHSP Adaptive Managment Plan
Prado Basin Habitat Sustainability Committee

Projected Change in Groundwater-Levels
FY2005 to 2030 -- Peace II Alternative

Figure 1-4


117°40'0"W
34°0'0"N
Change in Groundwater Levels
Spring 2011 to Spring 2030, feet
Prado Flood Control Basin
Chino Basin Desalter Authority Well
Chino Creek Well Field (actual)
OCWD Prado Wetlands
Rivers and Streams
Chino Airport
Pine Ave
Chandler St
Schleisman Rd
Prado Dam
Aerial Photo: USDA, 2014. Mosaic of photos from May 13, 2014 to June 3, 2014
Los Angeles County
Chino Basin
San Bernardino County
Orange County
Riverside County
Santa Ana
Prepared by:
WEI
Wildermuth Environmental, Inc.
Author: TCR
Date: 4/28/2016
File: Figure 1-5_Scenario5a_slideshow
0 1 2 Miles
0 1 2 3 KM
2016 PBHSP Adaptive Managment Plan
Prado Basin Habitat Sustainability Committee
Projected Change in Groundwater-Levels
2011 to 2030 -- Senario 5A
Figure 1-5

Section 2 – Monitoring Program for the PBHSP

IEUA and Watermaster developed the initial monitoring program for the PBHSP. The intent of the monitoring program is to characterize the historical, current, and future extent and quality of riparian habitat in Prado Basin, and if the degradation of the riparian habitat is documented, to provide information on the cause(s) of that degradation. If the cause(s) of degradation are attributed to Peace II implementation, the data from the monitoring program will aid in the development of efficient and effective mitigation measures.

The design of the initial monitoring program was based on the answer to Question 1 from Section 1:

1. *What are the factors that potentially can affect the extent and quality of the riparian habitat?*

The main factors that potentially can affect riparian habitat in the Prado Basin include, but are not limited to: groundwater levels, surface-water discharge, weather events, and long-term climate. Therefore, the initial monitoring program must include, at a minimum, integrated programs for the monitoring of the riparian habitat, groundwater, surface-water, weather, and climate.

The monitoring data will be stored in a centralized, relational PBHSP database. The data will be analyzed, interpreted, and reported on annually. Annual reporting will form the basis to adjust the monitoring program in future years, if necessary, to achieve the objectives of the PBHSP. Each year, the monitoring program may increase, decrease, or remain unchanged based on the analysis of the data and model results within the annual report. Because the PBHSP monitoring program may adjust from year to year, the detailed description of the monitoring program is a stand-alone document. The 2016 PBHSP monitoring program is attached herewith as Appendix A.

Section 3 – Predictive Groundwater Modeling

The monitoring and mitigation requirements in the Peace II SEIR (Biological Resources/Land Use & Planning—Section 4.4-3) call for annual reporting for the PBHSP that will include the following:

> *Annual reports will be prepared and will include recommendations for ongoing monitoring and any adaptive management actions required to mitigate any measured loss or* ***prospective loss*** *of riparian habitat that may be attributable to the Peace II Agreement (emphasis added).*

The meaning of "prospective loss" in this context is "future potential loss" of riparian habitat. A method to identify areas of prospective loss of riparian habitat is to use Watermaster's groundwater model to predict groundwater-level changes within the Prado Basin under the current and projected future conditions in the Basin, including but not limited to, the plans for pumping, storm-water recharge and supplemental-water recharge.

Most recently, Watermaster's 2013 groundwater model was used to evaluate past and future conditions in the Chino Basin, including, but not limited to, net recharge, the state of hydraulic control, and time histories of groundwater levels and storage (WEI, 2014). Figure 1-5 shows the model results of predicted change in groundwater levels in the Prado Basin area over the period of 2011-2030 (WEI, 2014). In this scenario, groundwater levels are predicted to rise in the Prado Basin area by up to five feet by 2030, which is not suggestive of prospective loss of riparian habitat due to declining groundwater levels.

Under Watermaster's proposed 2015 Safe Yield Reset Agreement, Watermaster's groundwater model will be updated every five years at a minimum, starting in 2019/20. The model updates will utilize all available information collected since the prior update, including the data collected for the PBHSP. The model results will be used to project the future hydrology of the Chino Basin for the purpose of redetermination of Safe Yield. The model will also be updated periodically, and used for other purposes, including assessment of hydraulic control, management of land subsidence, assessment of the balance of recharge and discharge, among others.

For the PBHSP, the Watermaster's most recent predictive modeling results will be used to answer the following question from Section 1 of the AMP:

8. *Are there areas of prospective loss of riparian habitat that may be attributable to the Peace II Agreement?*

The model results will be mapped and analyzed to identify areas (if any) where groundwater levels are projected to decline to depths that may negatively impact the riparian habitat in Prado Basin. The results and interpretations of this effort will be included in the Annual Report.

The monitoring and mitigation requirements in the Peace II SEIR (Biological Resources/Land Use & Planning—Section 4.4-3) call for annual reporting for the PBHSP that will include the following:

> *Annual reports will be prepared and will include recommendations for ongoing monitoring and any adaptive management actions required to mitigate any measured loss or prospective loss of riparian habitat that may be attributable to the Peace II Agreement.*

4.1 Annual Report of the Prado Basin Habitat Sustainability Committee

During the fourth quarter of each calendar year, Watermaster and IEUA will analyze the data and information generated from the monitoring and modeling activities performed during the prior water year ending on September 30, and will prepare a draft *Annual Report of the Prado Basin Habitat Sustainability Committee* (Annual Report). The draft Annual Report will include the following sections:

Section 1 – Introduction. This section will describe the background and objectives of the PBHSP and the Annual Report.

Section 2 – Monitoring and Modeling Activities. This section will describe the monitoring and groundwater-modeling activities performed during the previous water year for the PBHSP.

Section 3 – Results and Interpretations. This section will discuss and interpret the monitoring data and groundwater-modeling results analyzed during the previous water year and prior years. The types of data graphics and tables prepared for this section may include, but will not be limited to, the following:

- Maps, charts, and/or tables that depict the extent and quality of the riparian habitat, and how the riparian habitat has changed over time.
- Maps, charts, and/or tables that describe the factors that influence the riparian habitat (e.g. groundwater, surface water, weather, and climate) and how these factors have changed over time, and are predicted to change over time.
- Maps, charts, and/or tables that describe the relationships between the factors that impact the riparian habitat and observed changes in the riparian habitat, if any.
- Maps, charts, and/or tables that describe the predictive model results for future groundwater levels in the Prado Basin, and identify areas of prospective loss of riparian habitat.

Section 4 – Conclusions and Recommendations. This section will summarize the

main conclusions derived from the monitoring and modeling efforts through the previous water year, and will recommend activities for the monitoring program and annual reporting for the following fiscal year(s).

Section 5 – Mitigation Measures. This section will describe recommended measures to mitigate significant adverse impacts to the riparian habitat that have been attributed to Peace II implementation, if any. The Annual Report shall:

- Document the measured loss or prospective loss of riparian habitat.
- Describe how the implementation of the Peace II Agreement contributed to the measured or prospective loss of riparian habitat.
- Describe the specific mitigation measure(s), or the process and schedule to develop and implement mitigation measure(s), and how it is expected to mitigate the measured or prospective loss of riparian habitat.

Section 6 – Scope, Schedule, and Budget for Subsequent Fiscal Year. This section will describe scope-of-work, schedule, and budget for the PBHSP monitoring program, reporting, and mitigation measures for the subsequent fiscal year.

Section 7 – References. This section will list the publications cited in the report.

Appendix A – Monitoring Program for the PBHSP. This appendix will describe the current PBHSP monitoring program, which will include the recommended changes to the monitoring program described in *Section 4 – Conclusions and Recommendations.*

The draft Annual Report will be submitted to PBHSC members on or around January 31 of each year. Watermaster and IEUA will convene an annual meeting of the PBHSC in February of each year to review the draft Annual Report and call for comments and suggested revisions. Watermaster and IEUA will prepare a final Annual Report on or around April 1 of each fiscal year based on feedback from the PBHSC. The final Annual Report will be presented to the Watermaster and IEUA Boards for their receipt and filing by the end of each fiscal year (June 30).

4.2 Scope and Budget for Future Fiscal Years

Sections 4 and 5 of the draft Annual Report will describe recommended activities for the monitoring program, annual reporting, and mitigation measures, if any, for future fiscal year(s). Section 6 of the draft Annual Report will describe these recommendations in the form of a proposed scope-of-work, schedule, and budget[1]. The recommended scope-of-work and budget will be included for consideration by the Watermaster Pool Committees, Advisory Committee and Watermaster Board (and IEUA if necessary) for revisions and approval, as part of its regular budget approval process. Watermaster's budgeting process typically occurs

[1] According to the Memorandum of Understanding for Cooperative Efforts for Monitoring Programs between IEUA and Watermaster (IEUA, 2008), Watermaster is responsible for funding the monitoring, data analysis, and reporting for the PBHSP. IEUA and Watermaster fund capital improvement projects on a 50% cost-share basis.

during the fourth quarter of each fiscal year, and will coincide with schedule for drafting and approval of the Annual Report, described in Section 4.1, above.

Section 5 – Process to Revise the AMP

The main goal of the AMP is to continually verify its protective nature against adverse impacts to the riparian habitat caused by the implementation of the Peace II Agreement. Initially, this verification is accomplished through monitoring and annual reporting, and revision of the monitoring program and/or the AMP when appropriate.

The process to revise the AMP begins with recommendations in the Annual Report. These recommendations may include, but are not limited to, adjustments to the annual reporting and/or the implementation of mitigation measures. It is the sole discretion of Watermaster and IEUA to implement the mitigation measures and/or other revisions to the AMP recommended in the Annual Report. Decisions regarding implementation of the mitigation measures and/or other revisions to the AMP will be made in good faith and coordinated with the Prado Basin Habitat Sustainability Committee. To the extent that the recommendations in the Annual Report does not follow the recommendations of the PBHSC, a written statement explaining the differences will be provided in the Annual Report by the Watermaster and IEUA. Adjustments to the PBHSP monitoring program will be documented in the Annual Report in *Appendix A – Monitoring Program for the PBHSP*, which will not be considered a revision to the AMP.

Upon the recommendation of the PBHSC, IEUA and Watermaster will prepare a draft revised AMP, addressing any recommendations in the Annual Report. IEUA and Watermaster staff will prepare staff reports describing the recommended changes to the AMP and their fiscal impact, for consideration by the Watermaster and IEUA Boards.

The monitoring and mitigation requirements in the Peace II SEIR (Biological Resources/Land Use & Planning—Section 4.4-3) call for the:

> *[…] identification of water management options to minimize the Peace II Agreement effects on Prado Basin.*

And, they state that:

> *Annual reports will be prepared and will include recommendations for ongoing monitoring and any adaptive management actions required to mitigate any measured loss or prospective loss of riparian habitat that may be attributable to the Peace II Agreement. As determined by Watermaster and IEUA, significant adverse impacts to riparian habitat that are attributable to the Peace II Agreement will be mitigated.*

"Water management options" are herein referred to as "mitigation measures" and may include, but are not limited to, the following:

- Modification of groundwater production patterns, rates, and/or schedules.
- Modification of surface-water discharge in tributaries that flow through the Prado Basin.
- Targeted irrigation of impacted riparian habitat.

Specific mitigation measures will be developed and implemented to mitigate any measured loss or prospective loss of riparian habitat that is attributed to the implementation of the Peace II Agreement. Currently, there are no documented measured or prospective losses of riparian habitat that are attributable to the Peace II Agreement; hence, there are no mitigation measures being implemented. Future mitigation measures, if any, will be developed jointly by IEUA and Watermaster through the annual reporting process and will be recommended in the Annual Report.

The description of specific mitigation measures, if such measures are necessary, will be added to this section of AMP pursuant to the process described in *Section 5 – Process to Revise the AMP*.

Chino Basin Watermaster (CBWM). 2000. Peace Agreement, Chino Basin. SB 240104 v 1:08350.0001. 29 June 2000.

Chino Basin Watermaster (CBWM). 2007. Peace II Agreement: Party Support for Watermaster's OBMP Implementation Plan, - Settlement and Release of Claims Regarding Future Desalters. SB 447966 v 1:008250.0001. 25 October 2007.

Inland Empire Utilities Agency (IEUA) and Chino Basin Watermaster (CBWM). 2008. Memorandum of Understanding, Cooperative Efforts for Monitoring Programs Between the Inland Empire Utilities Agency and the Chino Basin Watermaster, Bright Line Approach. 17 December 2008.

Tom Dodson & Associates. 2000. *Program Environmental Impact Report for the Optimum Basin Management Program (SCH#2000041047).* Prepared for the Inland Empire Utilities Agency. July 2000.

Tom Dodson & Associates. 2010. *Final Subsequent Environmental Impact Report for the Inland Empire Utilities Agency Peace II Agreement Project.* Prepared for the Inland Empire Utilities Agency. 25 September 2010.

Wildermuth Environmental, Inc (WEI). 1999. *Optimum Basin Management Program. Phase I Report.* Prepared for the Chino Basin Watermaster. August 19, 1999.

Wildermuth Environmental, Inc (WEI). 2014. *2013 Chino Basin Groundwater Model Update and Recalculation of Safe Yield Pursuant to the Peace Agreement (Draft Report).* Prepared for the Chino Basin Watermaster. January 2014.

Appendix A

2016 Monitoring Program for the PBHSP

2016

Monitoring Program for the

Prado Basin Habitat Sustainability Program

May 31, 2016

Prepared for:

Inland Empire Utilities Agency
&
Chino Basin Watermaster

Prepared by:

Wildermuth Environmental, Inc.

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Acronyms, Abbreviations, and Initialisms

AMP	Adaptive Management Plan
CBWM	Chino Basin Watermaster
CIMIS	California Irrigation Management Information System
CIWQS	California Integrated Water Quality System Project
GHCN	Global Historical Climatology Network
GMP	Groundwater Monitoring Program
IEUA	Inland Empire Utilities Agency
MPE	Multisensor Precipitation Estimator
NEXRAD	Next Generation Radar
NWIS	National Water Information System
NWS	National Weather Service
OCWD	Orange County Water District
PBHSC	Prado Basin Habitat Sustainability Committee
PBHSP	Prado Basin Habitat Sustainability Program
POTWs	Publically owned treatment works
RHMP	Riparian Habitat Monitoring Program
SAR	Santa Ana River
SWMP	Surface-Water Monitoring Program
TDS	Total Dissolved Solids
USBR	United States Bureau of Reclamation
USGS	United States Geological Survey
WCMP	Weather and Climate Monitoring Program
WEI	Wildermuth Environmental Inc.

Appendix A – 2016 Monitoring Program for the PBHSP

The Inland Empire Utilities Agency (IEUA) and the Chino Basin Watermaster (Watermaster) developed this initial monitoring program (2016 monitoring program) for the Prado Basin Habitat Sustainability Program (PBHSP). The intent of this monitoring program is to characterize the historical, current, and future extent and quality of the riparian habitat in Prado Basin, and if degradation of the riparian habitat is documented, to provide the data necessary to describe the cause(s) of that degradation. If the cause(s) of degradation is conclusively attributed to Peace II implementation (CBWM, 2007), then the data from the monitoring program will aid in the development of the most efficient and effective mitigation measures.

The monitoring data will be stored in a centralized, relational PBHSP database. The data will be analyzed, interpreted, and reported on annually pursuant to Section 4 of the Adaptive Management Plan (AMP) for the PBHSP. Annual reporting will form the basis to adjust the monitoring program in future years, if necessary, to achieve the objectives of the PBHSP. Each year, the monitoring program may increase, decrease, or remain unchanged based on the analysis of the data and model results within the annual report. Because the PBHSP monitoring program may adjust from year to year, the detailed description of the monitoring program is a stand-alone document. The 2016 monitoring program is described herein (Appendix A) and Exhibit A shows the main monitoring locations of the 2016 monitoring program.

The design of the 2016 monitoring program was based on the answers to Question [1] from Section 1 of the AMP:

1. *What are the factors that potentially can affect the extent and quality of the riparian habitat?*

The main factors that potentially can affect the riparian habitat in the Prado Basin include, but are not limited to: groundwater-levels, surface-water discharge, weather events, and the long-term climate. As such, the 2016 monitoring program includes integrated programs for the monitoring of the riparian habitat, groundwater, surface-water, weather, and climate.

A.1 Riparian Habitat Monitoring Program

The objective of the Riparian Habitat Monitoring Program (RHMP) is to collect data to help answer the following questions from Section 1 of the AMP:

2. *What is a consistent quantifiable definition of "riparian habitat quality," including metrics and measurement criteria?*
3. *What has been the historical extent and quality of the riparian habitat in the Prado Basin?*
4. *How has the extent and quality of the riparian habitat changed during the implementation of Peace II?*

To answer these questions, the RHMP will produce a time-series of data and information on the extent and quality of the riparian habitat.

The RHMP will be collaboratively prepared by the Watermaster, IEUA, and OCWD. Thus, the RHMP as described herein is conceptual, and is referred to as the "Conceptual RHMP." The Conceptual RHMP includes two main types of monitoring and assessment of the riparian habitat: regional and site-specific.

A.1.1 Regional Assessment of Riparian Habitat

The objective of the regional assessment of riparian habitat will be to identify regional changes in the extent and quality of the riparian habitat in Prado Basin. Two potential methods for the regional assessment of the riparian habitat are:

1. Periodic mapping of the extent and quality of the riparian habitat through GIS analysis of high-resolution air photos. This type of analysis has been performed previously in the Prado Basin for the IEUA (USBR, 2008a). IEUA has retained the USBR to conduct similar surveys in 2015, 2018, and 2021.

2. Periodic mapping of the extent and quality of the riparian habitat through GIS analysis of multi-spectral remote-sensing data. This type of analysis has been performed previously in the Prado Basin for OCWD (Intera, 2015).

A.1.2 Site-Specific Assessment of Riparian Habitat

The objectives of the site-specific assessment of riparian habitat will be to ground-truth the changes identified in the regional assessment of the riparian habitat and to characterize those changes.

The methods of site-specific monitoring and assessment can be qualitative (such as repeated terrestrial photography) and/or quantitative (such as vegetation surveys). These types of site-specific monitoring and assessment have been performed previously in the Prado Basin for IEUA through vegetation surveys (USBR, 2008b) and by OCWD in its seasonal photo-monitoring program (OCWD, 2015; Harvey, 2015). Figure A-1 shows a composite high-resolution air photo of the Prado Basin taken during May and June 2014 and the locations where existing or historical site-specific riparian habitat monitoring has been performed.

A.1.3 Collect and Compile Historical Vegetation Data

To definitively characterize the impacts of Peace II implementation on the riparian habitat, it is necessary to understand the long-term historical extent and quality of riparian habitat and the factors that have affected it. This understanding can only be achieved through analysis of the historical data.

Existing data and information that has been collected, analyzed, or can be analyzed, to characterize the historical extent and quality of riparian habitat in the Prado Basin will be compiled into the PBHSP database. This effort is necessary because the riparian habitat in the

Prado Basin has changed in response to long-term anthropogenic and natural factors. The Peace II Agreement was signed in 2007, but Basin Re-Operation and progress toward Hydraulic Control functionally began in 2000 when the Chino Desalter wells began pumping.

A.2 Groundwater Monitoring Program

The implementation of the Peace II Agreement will change groundwater levels in the Chino Basin, which may influence the extent and quality of riparian habitat in the Prado Basin. The objective of the Groundwater Monitoring Program (GMP) is to help answer the following questions from Section 1 of the AMP:

5. *How have groundwater levels and quality, surface-water discharge, weather, and climate changed over time? What were the causes of the changes? And, did those changes result in an adverse impact to riparian habitat in the Prado Basin?*

7. *Are the factors that result in an adverse impact to riparian habitat in the Prado Basin related to Peace II implementation?*

9. *What are the potential mitigation actions that can be implemented if Peace II implementation results in an adverse impact to the riparian habitat?*

The intent of the GMP is to create a time-series of groundwater-production, groundwater-level, and groundwater-quality data that, in conjunction with analytical tools, will be used answer the above questions. Figure A-2 shows the locations of the monitoring wells in the GMP. The wells listed in Table A-1 were installed specifically for the GMP. Those wells, plus HCMP-5/1 and RP2-MW3, are specifically being monitored for groundwater levels and quality as part of the PBHSP monitoring program.

The wells shown in Figure A-2 are symbolized by the type of data collected, which include:

- *Groundwater Production.* Groundwater production is a major stress that affects groundwater levels. Watermaster collects groundwater-production data quarterly from all active production wells within the Chino Basin. Production data from all active wells, including and between the Chino Basin Desalter Wells and Prado Dam, will be collected and analyzed for the PBHSP.

- *Groundwater Levels.* Declining groundwater levels can be a factor related to Peace II implementation that adversely impacts the riparian habitat. Watermaster collects groundwater-level data at various wells in the vicinity of the Prado Basin to support its various monitoring programs. At many wells, groundwater-level data are collected by pressure transducers once every 15 minutes, including all of the wells listed on Table A-1. These data are retrieved on a quarterly basis. At some wells, groundwater levels are measured and recorded monthly by manual methods.

- *Groundwater Quality.* Groundwater-quality data will be compared to surface-water quality data to characterize groundwater/surface-water interactions in the Prado Basin,

which will help to determine whether and to what extent these interactions are important to the sustainability of the riparian habitat. The 2016 monitoring program for the PBHSP includes quarterly sampling and analysis at all 18 of the wells listed in Table A-1 for the chemical parameters listed in Table A-2. Future Annual Reports for the PBHSP will likely recommend changes to the frequency of sampling and the parameters analyzed. Watermaster also collects groundwater-quality data at other wells in the vicinity of the Prado Basin quarterly, annually and triennially to support its various monitoring programs. These other data may also be used in the analyses performed for the Annual Reports.

A.3 Surface-Water Monitoring Program

There are three primary components of surface-water discharge in the SAR and its tributaries above Prado Dam: storm flow, non-tributary flow, and base flow. Storm flow is rainfall runoff. Non-tributary flow typically originates from outside the watershed, such as imported water, or is an episodic transfer of water within the watershed. Base flow is the remainder and mainly includes tertiary-treated wastewater discharge from Publicly-Owned Treatment Works (POTWs), rising groundwater, and dry-weather runoff. Surface-water discharge that flows into the Prado Basin is either lost to evapotranspiration, percolates to groundwater, or becomes impounded behind Prado Dam. The US Army Corps of Engineers, in coordination with OCWD, controls the release of surface water through Prado Dam to Orange County.

The surface-water hydrology of the southern Chino Basin affects riparian habitat in the Prado Basin. For example, flood events can inundate portions of the Prado Basin and damage the riparian habitat. Surface water can also provide source water that supports riparian habitat. The full implementation of the Peace II Agreement will change groundwater levels in the Chino Basin, which may change the surface-water hydrology in the southern Chino Basin and in turn, may influence the extent and quality of riparian habitat in the Prado Basin. The surface-water hydrology must be tracked to ascertain its impact on the riparian habitat relative to other factors.

The objective of the Surface-Water Monitoring Program (SWMP) is to help answer the following questions from Section 1 of the AMP:

5. *How have groundwater levels and quality, surface-water discharge, weather, and climate changed over time? What were the causes of the changes? And, did those changes result in an adverse impact to riparian habitat in the Prado Basin?*
7. *Are the factors that result in an adverse impact to riparian habitat in the Prado Basin related to Peace II implementation?*
9. *What are the potential mitigation actions that can be implemented if Peace II implementation results in an adverse impact to the riparian habitat?*

The intent of the SWMP is to create a time-series of surface-water parameters in the vicinity of the Prado Basin that, in conjunction with analytical tools, can be used to answer the above

questions. The main surface-water parameters of interest include discharge in the SAR and its tributaries, the reservoir elevation behind Prado Dam, and water quality. No new surface-water monitoring sites are proposed as part of the 2016 PBHSP monitoring program. The SWMP will leverage publically-available datasets to create a historical and ongoing time-series of these parameters. Specific data sources include:

1. The United States Geological Survey (USGS) collects and compiles daily surface-water discharge rates and water-quality data at seven monitoring stations along the SAR and its tributaries in the vicinity of the Prado Basin. These data will be collected from the USGS's National Water Information System (NWIS). Figure A-3 shows the monitoring station locations. Table A-3 summarizes the data available from each of the USGS sites.
2. POTWs located upstream of Prado Dam record discharge rates and water-quality data for tertiary-treated effluent discharged to the SAR and its tributaries. Data already recorded by the POTWs will be collected and compiled quarterly from the State Water Resources Control Board's California Integrated Water Quality System Project (CIWQS) online database. Figure A-3 shows the POTW discharge outfall locations. Table A-4 lists the monitoring sites for the POTW discharge outfalls. Table A-5 summarizes the frequency that grab-sample parameters are collected from each of the POTWs sites and Table A-6 lists the parameters and calculation types available from composite-sample data measured at each of the POTWs sites.
3. Watermaster measures surface-water quality quarterly at two sites along the SAR as part of its Chino Basin Maximum Benefit Monitoring Program pursuant to the 2014 Work Plan (WEI, 2013). Figure A-3 shows the monitoring site locations. Table A-7 lists the analytes collected at these sites.
4. The US Army Corps of Engineers measures and records the elevation of the reservoir behind Prado Dam.

A.4 Weather and Climate Monitoring Program

Weather and climate are factors that can affect riparian habitat in the Prado Basin. Parameters that describe weather and climate are: air temperature, precipitation, humidity, solar radiation, and wind. The difference between weather and climate is duration. Weather is the atmospheric conditions over short periods of time (i.e. minutes to months). Climate describes the long-term behavior of atmospheric conditions (i.e. years to decades). Weather and climate are not factors related to Peace II implementation. That said, the historical, current, and future conditions for weather and climate must be characterized to ascertain their impact on riparian habitat in the Prado Basin relative to other factors.

The objective of the Weather and Climate Monitoring Program (WCMP) is to help answer the following questions from Section 1 of the AMP:

5. *How have groundwater levels and quality, surface-water discharge, weather, and climate*

changed over time? What were the causes of the changes? And, did those changes result in an adverse impact to riparian habitat in the Prado Basin?

7. *Are the factors that result in an adverse impact to riparian habitat in the Prado Basin related to Peace II implementation?*
9. *What are the potential mitigation actions that can be implemented if Peace II implementation results in an adverse impact to the riparian habitat?*

The WCMP of the PBHSP includes the monitoring of the following parameters in the vicinity of the Prado Basin: precipitation, temperature, and potential evapotranspiration. The WCMP will leverage publically-available datasets that are published online to create a historical and ongoing time-series of these parameters. Figure A-4 shows the locations of the climatic monitoring stations.

Two types of publically-available climatic datasets will be collected and compiled:

- *Time-series data measured at weather stations.* Available data will be acquired from monitoring stations in the Global Historical Climatology Network (GHCN), the National Weather Service (NWS) Cooperative Observer Program, the California Irrigation Management Information System (CIMIS), and the San Bernardino County Flood Control District (SBCFCD).

  The data from GHCN stations include: precipitation (daily), evaporation (daily), minimum temperature (daily), and maximum temperature (daily) from 1900 to the present. The data from NWS stations include: 15-minute and hourly precipitation from 1900 to the present. Based on their proximity to the Prado Basin and the quality of the historical data, the most important stations in these programs for the PBHSP are:

  - Prado Dam
  - Ontario Airport
  - Chino Airport
  - San Bernardino Hospital

  Data from CIMIS stations include: daily maximum and minimum values for measured parameters (air temperature, relative humidity, solar radiation, and wind speed) and calculated parameters (reference evapotranspiration [ETo], net radiation, and dew point temperature). Based on their proximity to the Prado Basin and the quality of the historical data, the most important CIMIS stations for the PBHSP are:

  - Pomona

- Riverside

- *Spatially-gridded datasets.* Available data come from radar scans of the high-resolution Multisensor Precipitation Estimator (MPE, also known as NEXRAD Stage IV) and from the PRISM Climate Group.

  The NEXRAD datasets include: hourly, 6-hour interval, and daily precipitation on a 4-kilometer grid within the continental US from 2002 to the present.

  The PRISM datasets include: monthly precipitation, minimum temperature, and maximum temperature on an 800-meter grid within California from 1895 to present. Figure A-4 displays an example of a gridded dataset of annual precipitation from PRISM across the Chino Basin area.

A.5 Other Factors that can Affect the Riparian Habitat

There are other potential factors that can affect riparian habitat in the Prado Basin. These factors may include, but are not limited to: fire, disease, pests, invasive species, and anthropogenic activities. To the extent necessary and possible, information on other factors that can affect the riparian habitat will be collected, compiled, and analyzed in the annual reporting described in Section 4 of the AMP.

The objective of this effort is to help answer the following question from Section 1 of the AMP:

6. *Are there other factors besides groundwater levels, surface-water discharge, weather, and climate that affect riparian habitat in the Prado Basin? What are those factors? And, did they (or do they) result in an adverse impact to riparian habitat in the Prado Basin?*

A.6 PBHSP Database

All data, information, imagery, and GIS layers collected under the monitoring program will be uploaded into a centralized, relational PBHSP database maintained by Watermaster. The database will be made available to the Prado Basin Habitat Sustainability Committee (PBHSC) upon request. Private well information obtained by Watermaster will be excluded from the PBHSP database unless authorization is obtained through Watermaster's process to release such information.

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Table A-1
Monitoring Wells Installed for the
Monitoring Program for the Prado Basin Habitat Sustainability Program

Well Name	Well Owner	Latitude	Longitude	Ground Surface Elevation	Reference Point Elevation	Well Depth	Nominal Well Diameter	Minimum Perforation Depth	Maximum Perforation Depth
		decimal degrees	*decimal degrees*	*ft-bgs*	*ft-bgs*	*ft-bgs*	*inches*	*ft-bgs*	*ft-bgs*
PB-1/1	IEUA	33.935322	-117.622051	536.65	538.32	60	4	25	55
PB-1/2	IEUA	33.935322	-117.622051	536.99	538.67	100	4	75	95
PB-2	IEUA	33.953535	-117.611258	575.22	577.02	67	4	42	62
PB-3/1	IEUA	33.940928	-117.588583	584.13	583.13	60	4	44.5	54.5
PB-3/2	IEUA	33.940928	-117.588583	583.96	583.96	105	4	80	100
PB-4/1	IEUA	33.951528	-117.559210	579.67	581.27	30	4	15	25
PB-4/2	IEUA	33.951528	-117.559210	579.72	581.34	70	4	45	75
PB-5/1	IEUA	33.921525	-117.628847	525.75	527.5	55	4	30	50
PB-5/2	IEUA	33.921525	-117.628847	525.8	527.58	85	4	60	80
PB-6/1	IEUA	33.930003	-117.639720	520.08	521.74	45	4	30	40
PB-6/2	IEUA	33.930003	-117.639720	520.25	521.72	95	4	58.5	88.5
PB-7/1	IEUA	33.941830	-117.654240	517.68	520.03	20	4	10	15
PB-7/2	IEUA	33.941830	-117.654240	517.94	520.06	90	4	60	85
PB-8	IEUA	33.952388	-117.669068	537.22	536.95	95	4	60	90
PB-9/1	IEUA	33.963099	-117.677509	560.31	561.95	45	4	30	40
PB-9/2	IEUA	33.963099	-117.677509	560.4	562.17	100	4	70	95

Table A-2
Groundwater Quality Analyte List
Monitoring Program for the Prado Basin Habitat Sustainability Program

Analyte	MRL	Units	Analysis Method
Alkalinity in CaCO3 units	2	mg/L	SM2320B
Ammonia Nitrogen	0.05	mg/L	EPA 350.1
Arsenic Total ICAP/MS	1	ug/L	EPA 200.8
Bicarbonate as HCO3 *Calculated*	2	mg/L	SM2320B
Boron Total ICAP	0.05	mg/L	EPA 200.7
Calcium Total ICAP	1	mg/L	EPA 200.7
Carbonate as CO3 *Calculated*	2	mg/L	SM2320B
Chloride	1	mg/L	EPA 300.0
Chromium Total ICAP/MS	1	ug/L	EPA 200.8
Fluoride	0.05	mg/L	SM 4500-C
Hexavalent Chromium (Dissolved)	0.02	ug/L	EPA 218.6
Hydroxide as OH *Calculated*	2	mg/L	SM2320B
Kjeldahl Nitrogen	0.2	mg/L	EPA 351.2
Magnesium Total ICAP	0.1	mg/L	EPA 200.7
Nitrate as Nitrogen by IC	0.1	mg/L	EPA 300.0
Nitrate as NO3 *Calculated*	0.44	mg/L	EPA 300.0
Nitrite as Nitrogen by IC	0.05	mg/L	EPA 300.0
Organic Nitrogen *Calculated*	0.2	mg/L	EPA 351.2
Perchlorate	4	ug/L	EPA 314.0
pH (H3=past HT not compliant)	0.1	Units	SM4500-HB
Potassium Total ICAP	1	mg/L	EPA 200.7
Sodium Total ICAP	1	mg/L	EPA 200.7
Specific Conductance, 25 C	2	umho/cm	SM2510B
Sulfate	0.5	mg/L	EPA 300.0
Silica	0.5	mg/L	EPA 200.7
Total Dissolved Solids (TDS)	10	mg/L	E160.1/SM2540C
Total Hardness as CaCO3 by ICP *Calcula*	3	mg/L	SM 2340B
Total Organic Carbon	0.3	mg/L	SM5310C/E415.3
Turbidity	0.05	NTU	EPA 180.1
Volatile Organic Compounds		ug/L	EPA 524.2
1,2,3-Trichloropropane (Low Level)	0.01	ug/L	CASRL-524M-TCP

Table A-3
Parameters Measured at USGS Gaging Stations
Monitoring Program for the Prado Basin Habitat Sustainability Program

Parameter	Measurement Frequency at USGS Gaging Stations*					
	SAR at MWD Xing	Temescal Creek above Main Street	San Antonio Creek at Riverside Drive	Chino Creek at Schaeffer Avenue	Cucamonga Creek	Santa Ana River below Prado Dam
Absorbance, 254 nm						irregular
Absorbance, UV, organic constituents, 280 nm, 1 cm path length						irregular
Alkalinity, field as calcium carbonate						irregular
Alkalinity, laboratory as calcium carbonate						Irregular
Aminomethylphosphonic acid, filtered (0.7 micron glass fiber filter), recoverable						irregular
Ammonia as N						irregular
Ammonia as NH4						irregular
Ammonia plus organic nitrogen, as N, filtered						irregular
Ammonia plus organic nitrogen, as N, unfiltered						irregular
Arsenic						irregular
Barometric pressure						Irregular
Bicarbonate						Irregular
Boron						irregular
Calcium						irregular
Carbon dioxide, water						irregular
Carbonate						irregular
Chloride						irregular
Cloud cover, percent						Irregular
Discharge (mean)	daily	daily	daily	daily	daily	daily
Dissolved oxygen						irregular
Dissolved oxygen, unfiltered, percent of saturation						irregular
Dissolved solids dried at 180 degrees Celsius	irregular					irregular
Dissolved solids	irregular					irregular
Fluoride						irregular
Gage height	instantaneous (15-min)	irregular		irregular	irregular	irregular
Glufosinate, (0.7 micron glass fiber filter), recoverable						irregular
Glyphosate (0.7 micron glass fiber filter), recoverable						irregular
Hardness as calcium carbonate						irregular
Hydrogen ion						irregular
Iron						irregular
Lithium						irregular
Magnesium						irregular
Nitrate as N						irregular
Nitrate plus nitrite, as N						irregular
Nitrate as nitrate						irregular
Nitrite as N						irregular
Nitrite as nitrite						irregular
Noncarbonate hardness as calcium carbonate, field						Irregular
Noncarbonate hardness as calcium carbonate, lab						irregular
Organic carbon						irregular
Organic nitrogen as N, filtered						irregular
Organic nitrogen as N, unfiltered						irregular
Orthophosphate as phosphorus						Irregular
Orthophosphate as PO4,						Irregular
Particulate nitrogen, suspended						irregular
pH, field						irregular
pH, laboratory						irregular
Phosphorus as phosphorus, filtered						irregular

Table A-3
Parameters Measured at USGS Gaging Stations
Monitoring Program for the Prado Basin Habitat Sustainability Program

Parameter	Measurement Frequency at USGS Gaging Stations*					
	SAR at MWD Xing	Temescal Creek above Main Street	San Antonio Creek at Riverside Drive	Chino Creek at Schaeffer Avenue	Cucamonga Creek	Santa Ana River below Prado Dam
Phosphorus as phosphorus, unfiltered						irregular
Potassium						irregular
Ratio of particulate nitrogen to particulate organic carbon						irregular
Selenium						irregular
Silica as SiO2						irregular
Sodium adsorption ratio						irregular
Sodium fraction of cations						irregular
Sodium						irregular
Specific conductance, field	irregular					irregular
Specific conductance, laboratory	irregular					irregular
Specific UV Absorbance, 254 nm, 1 cm path length, calculated						irregular
Stream width	irregular					irregular
Strontium						irregular
Sulfate						irregular
Suspended sediment concentration						irregular
Suspended sediment discharge						irregular
Suspended sediment, sieve diameter, percent smaller than 0.0625 millimeters						irregular
Temperature, air	irregular					irregular
Temperature, water	irregular					irregular
Total carbon [inorganic plus organic], suspended sediment						irregular
Total dissolved solids						irregular
Total inorganic carbon, suspended sediment						irregular
Total nitrogen [nitrate + nitrite + ammonia + organic-N], analytically determined						irregular
Total nitrogen [nitrate + nitrite + ammonia + organic-N], filtered						irregular
Total nitrogen [nitrate + nitrite + ammonia + organic-N], unfiltered						irregular
Total organic carbon, suspended sediment						irregular
Turbidity, unfiltered						irregular
Vanadium						irregular
Velocity at point in stream	irregular					irregular
Weather, World Meteorological Organization code	irregular					irregular
Wind speed						irregular

* "Irregular" frequency is typically several times per month

Table A-4
Monitoring Sites for POTW Discharge Outfalls Tributary to Prado Dam
Monitoring Program for the Prado Basin Habitat Sustainability Program

POTW	Monitoring Site	Site Type	Associated Effluent Monitoring Site	Receiving Water	Site Description
City of Corona WWTP #1	M-001	Effluent Monitoring	001	Reach 3 of Santa Ana River	Tertiary effluent to Butterfield Drain (to Temescal Creek) after dechlorination chamber
	R-001D	Receiving Water Monitoring	001	Prado Basin	500 feet downstream of outfall to Butterfield Drain
	R-001U	Receiving Water Monitoring	001	Prado Basin	100 feet upstream of outfall to Butterfield Drain
Western Riverside County Regional Wastewater Treatment Plant (WRCRWTP)	M-001	Effluent Monitoring	001	Prado Basin Management Zone and Reach 3 of the Santa Ana River	Effluent pump station for discharge to Reach 3 of Santa Ana River
	R-001D	Receiving Water Monitoring	None	Santa Ana River Reach 3	Receiving water, 500 feet downstream of the discharge to Reach 3 of Santa Ana River
	R-001U	Receiving Water Monitoring	None	Santa Ana River Reach 3	Receiving water, approximately 100 feet upstream of the discharge to Reach 3 of Santa Ana River
City of Riverside Regional Water Quality Control Plant (RCWRF)	M-001A	Effluent Monitoring	001, 002	Santa Ana River Reach 3	Effluent to Reach 3 of Santa Ana River, close to the end of effluent pipeline
	M-001B	Effluent Monitoring	001, 002	Santa Ana River Reach 3	At the end of the chlorine contact tank 3. This station is for coliform testing
	R-001D	Receiving Water Monitoring	None	Santa Ana River Reach 3	Santa Ana River, downstream of the most downstream point of discharge
	R-001U	Receiving Water Monitoring	None	Santa Ana River Reach 3	Receiving surface water, upstream of Santa Ana River at the Metropolitan Water District pipeline crossing
RIX	M-001	Effluent Monitoring	001	Santa Ana River Reach 4, which overlies the Riverside-A Groundwater Management Zone	Extracted tertiary treated and disinfected effluent
Rialto	M-001	Effluent Monitoring	001	Lined flood control channel tributary to Santa Ana River, Reach 4, which overlies the Riverside-A Groundwater Management Zone	Final effluent downstream of dechlorination
	M-001A	Effluent Monitoring	001	"	Immediately downstream of filters
	M-001B	Effluent Monitoring	001	"	Discharge weir of chlorine contact tank
IEUA	M-001A	Effluent Monitoring	001	Prado Park Lake	RP-1 effluent Outfall to Prado Park Lake
	M-001B	Effluent Monitoring	001	N/A	At the RP-1 splitter box
	M-002A	Effluent Monitoring	002	Reach 1 of Cucamonga Creek	RP-1 and RP-4 Effluent outfall to Reach 1 of Cucamonga Creek
	M-003	Effluent Monitoring	003	Reach 2 of Chino Creek	RP-5 Effluent to Reach 2 of Chino Creek
	M-004	Effluent Monitoring	004	Reach 2 of Chino Creek	CCWRF Effluent to Reach 2 of Chino Creek
	R-002D	Receiving Water Monitoring	002	Cucamonga Creek	Cucamonga Creek within 500 feet downstream of DP 002 after blending
	R-002U	Receiving Water Monitoring	002	Cucamonga Creek	Cucamonga Creek within 100 feet upstream of the DP 002
	R-003D	Receiving Water Monitoring	003	Chino Creek	Chino Creek within 500 feet downstream of DP 003 in
	R-003U	Receiving Water Monitoring	003	Chino Creek	Chino Creek within 100 feet upstream of DP 003
	R-004U	Receiving Water Monitoring	004	Chino Creek	Chino Creek within 100 feet upstream of DP 004

Table A-6

Grab-Sample Parameters Measured at POTW Outfalls

Monitoring Program for the Prado Basin Habitat Sustainability Program

	[illegible]			[illegible]			[illegible]				RIX	Rialto		IEUA									
Parameter	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	M-001	M-001	M-001B	M-001A	M-001B	M-001C	M-003	M-004	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1,1,1-Trichloroethane			Quarterly	Annual			Annual			Annual													
1,1,2,2-Tetrachloroethane			Quarterly	Annual			Annual			Annual													
1,1,2-Trichloroethane			Quarterly	Annual			Annual			Annual													
1,1-Dichloroethane			Quarterly	Annual			Annual			Annual													
1,1-Dichloroethylene			Quarterly	Annual			Annual			Annual													
1,2,4-Trichlorobenzene			Quarterly	Annual			Annual			Annual													
1,2-Dichlorobenzene			Quarterly	Annual			Annual			Annual													
1,2-Dichloroethane			Quarterly	Annual			Annual			Annual													
1,2-Dichloropropane			Quarterly	Annual			Annual			Annual													
1,2-Diphenylhydrazine			Quarterly	Annual			Annual			Annual													
1,3-Dichlorobenzene			Quarterly	Annual			Annual			Annual													
1,3-Dichloropropylenes, Sum			Quarterly	Annual			Annual			Annual													
1,4-Dichlorobenzene			Quarterly	Annual			Annual			Annual													
2,3,7,8-TCDD (Dioxin)	Monthly		Quarterly	Annual			Quarterly																
2,4,6-Trichlorophenol			Quarterly	Annual			Annual			Annual													
2,4-Dichlorophenol			Quarterly	Annual			Annual			Annual													
2,4-Dimethylphenol			Quarterly	Annual			Annual			Annual													
2,4-Dinitrophenol			Quarterly	Annual			Annual			Annual													
2,4-Dinitrotoluene			Quarterly	Annual			Annual			Annual													
2,6-Dinitrotoluene			Quarterly	Annual			Annual			Annual													
2-Chloroethylvinyl Ether			Quarterly	Annual			Annual			Annual													
2-Chloronaphthalene			Quarterly	Annual			Annual			Annual													
2-Chlorophenol			Quarterly	Annual			Annual			Annual													
2-Nitrophenol			Quarterly	Annual			Annual			Annual													
3,3-Dichlorobenzidine			Quarterly	Annual			Annual			Annual													
4,4-DDD			Quarterly	Annual			Annual			Annual													
4,4-DDE			Quarterly	Annual			Annual			Annual													
4,4-DDT	Quarterly		Quarterly	Annual			Annual			Annual													
4,6-Dinitro-2-methylphenol			Quarterly	Annual			Annual			Annual													
4-Bromophenyl Phenyl Ether			Quarterly	Annual			Annual			Annual													
4-Chloro-3-methylphenol			Quarterly	Annual			Annual			Annual													
4-Chlorophenyl Phenyl Ether			Quarterly	Annual			Annual			Annual													
4-Nitrophenol			Quarterly	Annual			Annual			Annual													
Acenaphthene			Quarterly	Annual			Annual			Annual													
Acenaphthylene			Quarterly	Annual			Annual			Annual													
Acrolein			Quarterly	Annual			Annual			Annual													
Acrylonitrile			Quarterly	Annual			Annual			Annual													
Acute Toxicity												Monthly		Biweekly		Weekly		Monthly					
Aldrin			Quarterly	Annual			Annual			Annual													
Alkalinity, Bicarbonate (as CaCO3)															Biweekly	Weekly	Monthly	Monthly					
Alkalinity, Carbonate (as CaCO3)															Monthly	Weekly	Monthly	Monthly					
alpha-BHC			Quarterly	Annual			Annual			Annual													
Aluminum, Total Recoverable	Quarterly						Quarterly								Monthly	Monthly	Monthly	Monthly					
Ammonia, Total (as N)	Daily			Monthly			Daily				Weekly	Weekly			Monthly	Monthly	Monthly	Monthly					
Anthracene			Quarterly	Annual			Annual			Annual													
Antimony, Total			Quarterly																				
Antimony, Total Recoverable	Quarterly			Annual			Annual			Annual					Monthly	Monthly	Monthly	Monthly					
Arsenic, Total			Quarterly																				
Arsenic, Total Recoverable	Quarterly			Annual			Quarterly								Monthly	Monthly	Monthly	Biweekly					
Barium, Total Recoverable	Quarterly						Quarterly								Monthly	Monthly	Monthly	Monthly					
Benzene			Quarterly	Annual			Annual			Annual													
Benzidine			Quarterly	Annual			Annual			Annual													
Benzo(a)anthracene			Quarterly	Annual			Annual			Annual													
Benzo(a)pyrene			Quarterly	Annual			Annual			Annual													
Benzo(b)fluoranthene			Quarterly	Annual			Annual			Annual													
Benzo(ghi)perylene			Quarterly	Annual			Annual			Annual													
Benzo(k)fluoranthene			Quarterly	Annual			Annual			Annual													
Beryllium, Total			Quarterly																				
Beryllium, Total Recoverable				Annual			Annual			Annual					Monthly	Monthly	Monthly	Monthly					
beta-BHC	Quarterly		Quarterly	Annual			Quarterly			Quarterly													
Bicarbonate Ion (as HCO3)	Quarterly										Weekly												
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C)	Weekly			Monthly			Daily					Weekly			Monthly	Monthly	Monthly	Monthly					
Bis (2-Chloroethoxy) Methane			Quarterly	Annual			Annual			Annual													
Bis (2-Chloroethyl) Ether			Quarterly	Annual			Annual			Annual													
Bis (2-Chloroisopropyl) Ether			Quarterly	Annual			Annual			Annual													
Bis (2-Ethylhexyl) Phthalate	Weekly		Quarterly	Monthly			Annual			Annual		Monthly			Monthly	Monthly		Monthly					
BOD5 @ 20 Deg. C, Percent Removal												Weekly											
Boron, Total Recoverable	Quarterly						Quarterly								Monthly	Monthly	Monthly	Monthly					
Bromoform			Quarterly	Annual			Annual			Annual							Monthly						
Bromomethane			Quarterly	Annual			Annual			Annual													
Butylbenzyl Phthalate			Quarterly	Annual			Annual			Annual													

Table A-5
Grab-Sample Parameters Measured at POTW Outfalls
Monitoring Program for the Prado Basin Habitat Sustainability Program

Parameter	Corona			WMWD			RCWA				Rix	Rialto		IEUA									
	M-001	R-001D	R-001U	M-001	[illegible]	[illegible]	M-001A	M-001B	R-001D	R-001U	M-001	M-001	M-001B	M-001A	M-001B	M-002A	M-003	M-004	R-002D	R-002U	R-003D	R-003U	R-004U
Cadmium, Total			Quarterly																				
Cadmium, Total Recoverable	Quarterly			Annual			Quarterly								Monthly	Monthly	Monthly	Monthly					
Calcium, Total Recoverable							Monthly				Monthly				Monthly	Monthly	Monthly	Monthly					
Carbon Tetrachloride			Quarterly	Annual			Annual			Annual													
Carbonate Ion (as CO3)	Quarterly						Quarterly				Weekly												
Chemical Oxygen Demand (COD)															Monthly								
Chlordane			Quarterly	Annual			Annual			Annual													
Chloride	Quarterly						Monthly				Monthly				Monthly	Monthly	Monthly	Monthly					
Chlorine, Total Residual	Daily																						
Chlorobenzene			Quarterly	Annual			Annual			Annual													
Chloroethane			Quarterly	Annual			Annual			Annual													
Chloroform			Quarterly	Annual			Quarterly										Monthly						
Chloromethane			Quarterly	Annual			Annual			Annual													
Chromium (III)			Quarterly	Annual			Annual																
Chromium (VI)			Quarterly	Annual			Annual																
Chromium (VI) Total Recoverable	Quarterly		–																				
Chromium, Total Recoverable							Quarterly								Monthly	Monthly	Monthly	Monthly					
Chronic Toxicity	Monthly						Monthly							Monthly	Monthly	Monthly	Monthly	Monthly					
Chrysene			Quarterly	Annual			Annual			Annual													
Cobalt, Total Recoverable	Quarterly						Quarterly								Monthly	Monthly	Monthly	Monthly					
Copper, Total			Quarterly									Monthly											
Copper, Total Recoverable	Quarterly			Annual			Quarterly								Monthly	Monthly	Monthly	Monthly					
Cyanide, Free Available	Monthly			Monthly			Quarterly								Monthly	Daily	Monthly	Monthly					
Cyanide, Total (as CN)	Monthly		Quarterly				Quarterly					Monthly											
delta-BHC			Quarterly	Annual			Annual			Annual													
Dibenzo(a,h)anthracene	Monthly			Annual			Annual			Annual													
Dibenzo(a,h)anthracene	Quarterly		Quarterly	Annual			Annual			Annual													
Dibromochloromethane	Quarterly		Quarterly	Annual			Quarterly										Monthly						
Dichlorobromomethane			Quarterly	Annual			Quarterly										Monthly						
Dieldrin			Quarterly	Annual			Annual			Annual													
Diethyl Phthalate			Quarterly	Annual			Annual			Annual													
Dimethyl Phthalate			Quarterly	Annual			Annual			Annual													
Di-n-butyl Phthalate			Quarterly	Annual			Annual			Annual													
Di-n-octyl Phthalate			Quarterly	Annual			Annual			Annual													
Dissolved Oxygen		Weekly			Monthly	Monthly			Weekly	Weekly									Daily	Weekly	Weekly	Weekly	Weekly
Electrical Conductivity @ 25 Deg. C	Daily										Daily												
Endosulfan I			Quarterly	Annual			Quarterly																
Endosulfan II			Quarterly	Annual			Annual			Annual													
Endosulfan Sulfate			Quarterly	Annual			Annual			Annual													
Endrin			Quarterly	Annual			Annual			Annual													
Endrin Aldehyde			Quarterly	Annual			Quarterly			Quarterly													
Ethylbenzene			Quarterly	Annual			Annual			Annual													
Fecal Coliform	Daily																						
Flow	Daily			Monthly		Monthly	Daily				Daily									Monthly		Monthly	Twice per Week
Fluoranthene			Quarterly	Annual			Quarterly			Quarterly													
Fluorene			Quarterly	Annual			Annual			Annual													
Fluoride, Total	Quarterly						Monthly				Monthly				Monthly	Daily	Monthly	Monthly					
gamma-BHC			Quarterly	Annual			Annual			Annual													
Hardness, Total (as CaCO3)	Monthly			Monthly	Monthly	Monthly	Monthly				Monthly	Monthly			Monthly	Daily	Monthly	Monthly	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly
Heptachlor			Quarterly	Annual			Quarterly																
Heptachlor Epoxide			Quarterly	Annual			Quarterly																
Hexachlorobenzene			Quarterly	Annual			Annual			Annual													
Hexachlorobutadiene			Quarterly	Annual			Annual			Annual													
Hexachlorocyclopentadiene			Quarterly	Annual			Annual			Annual													
Hexachloroethane			Quarterly	Annual			Annual			Annual													
Indeno (1,2,3-cd) Pyrene			Quarterly	Annual			Annual			Annual													
Iron, Total Recoverable	Quarterly						Quarterly																
Isophorone			Quarterly	Annual			Annual			Annual													
Lead, Total			Quarterly																				
Lead, Total Recoverable	Quarterly			Annual			Quarterly								Monthly	Daily	Monthly	Monthly					
Magnesium, Total Recoverable	Monthly						Monthly				Monthly				Monthly	Twice per week	Monthly	Monthly					
Manganese, Total Recoverable	Quarterly																						
Mercury, Total	Monthly		Quarterly	Monthly								Monthly											
Mercury, Total Recoverable				Annual			Quarterly								Monthly	Twice per week	Monthly	Monthly					
Methylene Chloride			Quarterly	Annual			Annual			Annual													
Naphthalene			Quarterly	Annual			Annual			Annual													
Nickel, Total			Quarterly																				
Nickel, Total Recoverable	Quarterly			Annual			Quarterly								Monthly	Twice per week	Monthly	Monthly					
Nitrate, Total (as N)	Monthly						Daily				Weekly	Monthly											
Nitrobenzene			Quarterly	Annual			Annual			Annual													
Nitrogen, Total (as N)															Monthly	Twice per week	Monthly	Monthly					

Table A-5
Grab-Sample Parameters Measured at POTW Outfalls
Monitoring Program for the Prado Basin Habitat Sustainability Program

Parameter	Corona			Inland Empire Utilities Agency			Orange County Sanitation District			Riverside		Western Municipal Water District										
	M-001	I-001	R-001	M-001	I-002	R-001	M-001	I-001	I-002	R-001	M-001	M-001	I-001	I-002	R-001	M-001	I-001	I-002	R-001	M-001	I-001	R-001
Nitrogen, Total Inorganic (as N)	Monthly			Monthly			Daily				Weekly	Twice per month				Monthly	Twice per week	Monthly	Monthly		Weekly			Monthly	Twice per week
N-Nitrosodimethylamine	Quarterly		Quarterly	Annual			Annual			Annual	Monthly														
N-Nitrosodi-n-Propylamine			Quarterly	Annual			Annual			Annual															
N-Nitrosodiphenylamine			Quarterly	Annual			Annual			Annual															
PCB-1016			Quarterly	Annual			Annual			Annual															
PCB-1221			Quarterly	Annual			Annual			Annual															
PCB-1232			Quarterly	Annual			Annual			Annual															
PCB-1242			Quarterly	Annual			Annual			Annual															
PCB-1248			Quarterly	Annual			Annual			Annual															
PCB-1254			Quarterly	Annual			Annual			Annual															
PCB-1260			Quarterly	Annual			Annual			Annual															
Pentachlorophenol			Quarterly	Annual			Annual			Annual															
pH	Daily	Weekly			Monthly	Monthly		Weekly	Weekly		Daily										Weekly	Weekly	Weekly	Monthly	Twice per week
Phenanthrene			Quarterly	Annual			Annual			Annual															
Phenol, Single Compound				Annual			Annual			Annual															
Phenols, Total			Quarterly				Quarterly																		
Pyrene			Quarterly	Annual			Annual			Annual															
Selenium, Total			Quarterly																						
Selenium, Total Recoverable	Quarterly			Annual			Quarterly									Monthly	Daily		Monthly						
Silver, Total			Quarterly																						
Silver, Total Recoverable	Quarterly			Annual			Quarterly									Monthly	Daily	Monthly	Weekly						
Sodium, Total Recoverable	Quarterly						Quarterly				Monthly					Weekly	Twice per week	Monthly	Weekly						
Sulfate, Total (as SO4)	Quarterly						Monthly				Monthly					Weekly	Monthly	Monthly	bimonthly						
Temperature		Weekly		Monthly	Monthly	Monthly	Weekly		Weekly	Weekly		Daily									Weekly	Weekly	Weekly	Weekly	Twice per week
Tetrachloroethene			Quarterly	Annual			Annual			Annual															
Thallium, Total			Quarterly																						
Thallium, Total Recoverable				Annual			Quarterly			Quarterly						Weekly	Monthly	Monthly	Weekly						
Toluene	Quarterly		Quarterly	Annual			Annual			Annual															
Total Coliform				Monthly				Daily			Daily		Daily			Weekly	Weekly	Twice per week	Daily						
Total Dissolved Solids (TDS)	Monthly			Monthly			Twice Weekly				Monthly	Monthly				Weekly	Monthly	Monthly	Daily	Biweekly	Weekly		Weekly		Twice per week
Total Organic Carbon (TOC)	Daily			Monthly			Quarterly				Monthly					Weekly	Monthly	Monthly	Daily						
Total Suspended Solids (TSS)	Daily			Monthly			Daily					Weekly				Weekly	Monthly	Monthly	Daily	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly
Total Suspended Solids (TSS), Percent Removal												Weekly													
Toxaphene			Quarterly	Annual			Annual			Annual															
trans-1,2-Dichloroethene			Quarterly	Annual			Annual			Annual															
Trichloroethene			Quarterly	Annual			Annual			Annual															
Turbidity	Daily										Daily														
Vinyl Chloride			Quarterly	Annual			Quarterly			Quarterly															
Zinc, Total			Quarterly																						
Zinc, Total Recoverable	Quarterly			Annual			Quarterly									Weekly	Monthly	Monthly	Monthly						

Table A-6
Composite-Sample Parameters Measured at POTW Outfalls
Monitoring Program for the Prado Basin Habitat Sustainability Program

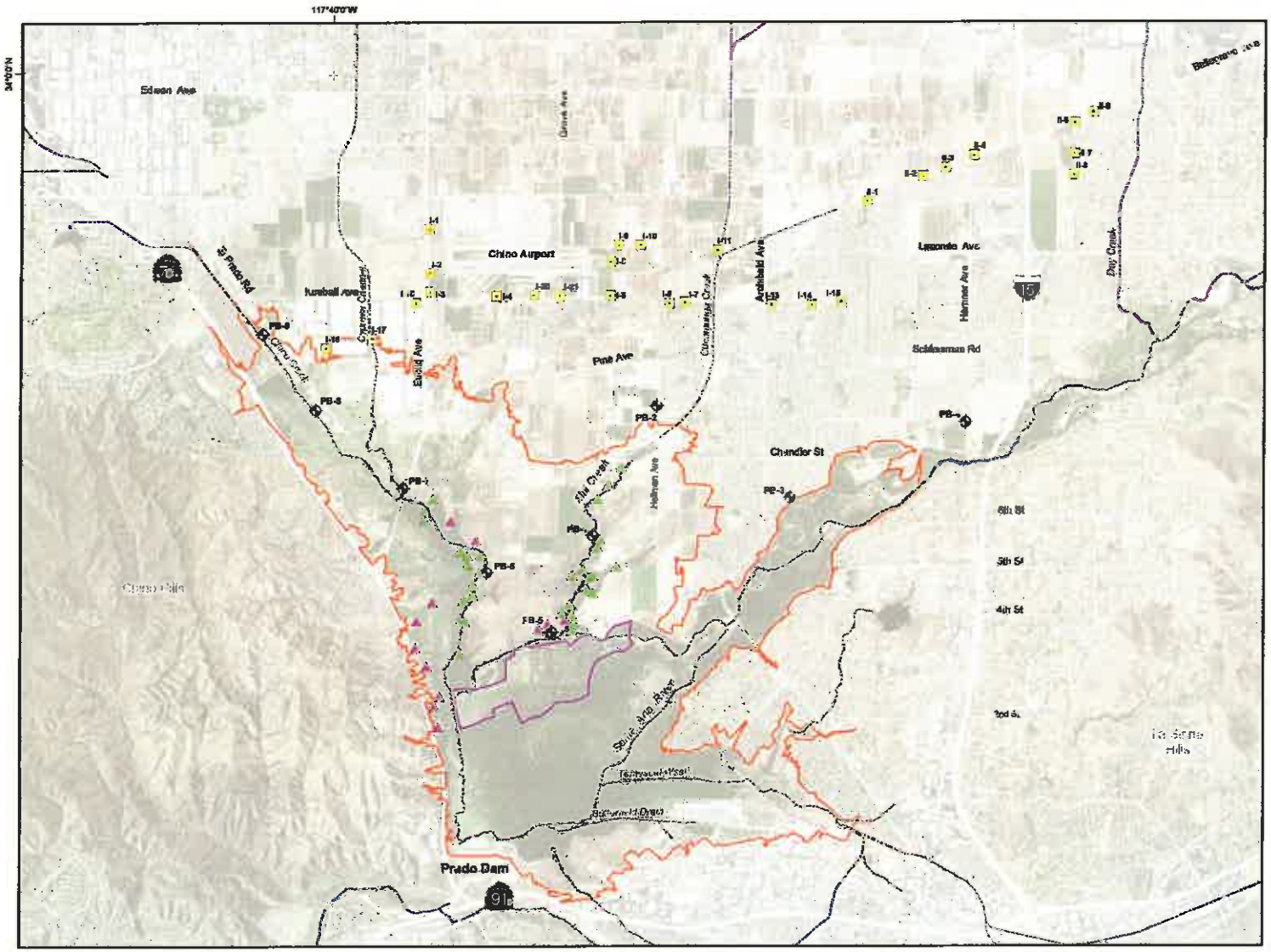
Parameter	Calculation Type	Corona			WRCRWTP		RCWRF				RIX	Rialto			IEUA				
		M-001	R-001D	R-001U	M-001	R-001D	R-001U	M-001A	M-001B	R-001D	R-001U	M-001	M-001	M-001A	M-001B	M-001A	M-001B	M-002A	M-003	M-004
2,3,7,8-TCDD (Dioxin)	Daily Maximum	x																		
2,3,7,8-TCDD (Dioxin)	Monthly Average (Mean)	x																		
Aluminum, Total Recoverable	Daily Maximum							x												
Ammonia, Total (as N)	Average Monthly (AMEL)				x			x												
Ammonia, Total (as N)	Daily Maximum	x						x				x								
Ammonia, Total (as N)	Monthly Average (Mean)	x						x												
Arsenic, Total Recoverable	Daily Maximum							x												
Barium, Total Recoverable	Daily Maximum											x								
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C)	7-Day Average of Daily Maximums							x												
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C)	Average Monthly (AMEL)				x			x					x							
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C)	Average Weekly (AWEL)											x								
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C)	High Weekly Average	x																		
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C)	Monthly Average (Mean)	x			x															
Bis (2-Ethylhexyl) Phthalate	Average Monthly (AMEL)				x												x	x	x	x
Bis (2-Ethylhexyl) Phthalate	Maximum Daily (MDEL)							x												
BOD5 @ 20 Deg. C, Percent Removal	Average Monthly (AMEL)							x								x		x	x	x
BOD5 @ 20 Deg. C, Percent Removal	Percent Reduction	x						x								x		x	x	x
BOD5 @ 20 Deg. C, Percent Removal	Percent Reduction (Daily)							x												
Boron, Total Recoverable	Daily Maximum							x												
Cadmium, Total Recoverable	Daily Maximum							x												
Calcium, Total Recoverable	Daily Maximum	x						x												
Carbonate Ion (as CO3)	Daily Maximum							x												
Chloride	Daily Maximum															x		x	x	x
Chlorine, Total Residual	Daily Average (Mean)															x		x	x	x
Chlorine, Total Residual	Daily Maximum	x											x							
Chlorine, Total Residual	Instantaneous Maximum (IMAX)							x												
Chloroform	Daily Maximum							x												
Chromium, Total Recoverable	Daily Maximum							x												
Chronic Toxicity	Average Monthly (AMEL)				x															
Chronic Toxicity	Daily Maximum							x												
Chronic Toxicity	Monthly Median of Mean Daily											x								
Cobalt, Total Recoverable	Daily Maximum							x												
Copper, Total Recoverable	Daily Maximum							x												
Cyanide, Free Available	Average Monthly (AMEL)				x			x												
Cyanide, Free Available	Daily Maximum							x												
Cyanide, Free Available	Maximum Daily (MDEL)				x															
Dibenzo(a,h)anthracene	Daily Maximum	x																		
Dibenzo(a,h)anthracene	Monthly Average (Mean)	x								x	x									
Dissolved Oxygen	Daily Maximum							x												
Electrical Conductivity @ 25 Deg. C	Average Monthly (AMEL)							x					x			x		x	x	x
Electrical Conductivity @ 25 Deg. C	Daily Average (Mean)				x			x				x	x			x		x	x	x
Electrical Conductivity @ 25 Deg. C	Daily Maximum							x												
Electrical Conductivity @ 25 Deg. C	Instantaneous Maximum (IMAX)				x							x								
Electrical Conductivity @ 25 Deg. C	Monthly Average (Mean)							x												
Flow	Average Monthly (AMEL)				x			x								x		x	x	x
Flow	Daily Average (Mean)												x							
Flow	Daily Discharge											x								
Flow	Daily Maximum				x			x				x								
Flow	Monthly Average (Mean)																			
Flow	Daily Maximum							x												
Fluoride, Total	Daily Maximum							x												
Hardness, Total (as CaCO3)	Daily Maximum							x												
Iron, Total Recoverable	Daily Maximum							x												
Lead, Total Recoverable	Daily Maximum							x												
Magnesium, Total Recoverable	Daily Maximum							x												
Manganese, Total Recoverable	Daily Maximum																			
Mercury, Total	Daily Maximum	x																		
Mercury, Total	Monthly Average (Mean)	x																		
Mercury, Total Recoverable	Daily Maximum							x												
Nickel, Total Recoverable	Daily Maximum							x												
Nitrate, Total (as N)	Average Monthly (AMEL)							x												
Nitrate, Total (as N)	Daily Maximum							x				x				x				
Nitrogen, Total Inorganic (as N)	12-Month Average	x			x			x												
Nitrogen, Total Inorganic (as N)	Average Monthly (AMEL)							x												
Nitrogen, Total Inorganic (as N)	Daily Maximum							x					x							
pH	24-hour Average															x		x	x	x
pH	Daily Average (Mean)																			
pH	Daily Instantaneous Maximum (IMAX)							x												

Table A-6
Composite-Sample Parameters Measured at POTW Outfalls
Monitoring Program for the Prado Basin Habitat Sustainability Program

Parameter	Calculation Type	Cercos			WRCRWTF			RCWRF				RIX	Rialto			IEUA				
		M-001	R-001D	R-001U	M-001	R-001D	R-001U	M-001A	M-001B	R-001B	R-001U	M-001	M-001	M-001A	M-001C	M-001A	R-001B	M-002A	M-002	M-00#
pH	Daily Instantaneous Minimum (MIN)							x												
pH	Daily Maximum							x		x	x					x		x	x	x
pH	Daily Minimum							x								x		x	x	x
pH	Instantaneous Maximum (IMAX)				x			x				x								
pH	Instantaneous Minimum (IMIN)				x			x				x								
Phenols, Total	Daily Maximum							x												
Selenium, Total Recoverable	Daily Maximum							x												
Silver, Total Recoverable	Daily Maximum							x												
Sodium, Total Recoverable	Daily Maximum							x												
Sulfate, Total (as SO4)	Daily Maximum							x												
Temperature	Daily Average (Mean)															x		x	x	x
Temperature	Daily Maximum							x		x	x									
Total Coliform	7-Day Average of Daily Maximums											x								
Total Coliform	7-Day Median				x				x						x		x		x	x
Total Coliform	Instantaneous Maximum (IMAX)											x								
Total Dissolved Solids (TDS)	12-Month Average	x			x			x				x				x				
Total Dissolved Solids (TDS)	Average Monthly (AMEL)							x												
Total Dissolved Solids (TDS)	Daily Maximum							x												
Total Dissolved Solids (TDS)	Delta from Background				x															
Total Organic Carbon (TOC)	Daily Maximum							x												
Total Suspended Solids (TSS)	7-Day Average of Daily Maximums											x								
Total Suspended Solids (TSS)	Average Monthly (AMEL)				x			x					x							
Total Suspended Solids (TSS)	Average Weekly (AWEL)				x								x							
Total Suspended Solids (TSS)	High Weekly Average	x																		
Total Suspended Solids (TSS)	Monthly Average (Mean)	x										x								
Total Suspended Solids (TSS)	Weekly Average (Mean)							x												
Total Suspended Solids (TSS), Percent Removal	Average Monthly (AMEL)							x									x	x	x	x
Total Suspended Solids (TSS), Percent Removal	Percent Reduction	x						x												
Total Suspended Solids (TSS), Percent Removal	Percent Reduction (Weekly)							x												
Turbidity	24-hour Average													x						
Turbidity	Daily Average (Mean)							x								x		x	x	x
Turbidity	Daily Maximum	x										x				x		x	x	x
Turbidity	Instantaneous Maximum (IMAX)							x												
Turbidity	Monthly Average (Mean)											x								
Zinc, Total Recoverable	Daily Maximum							x												

Table A-7
Surface-Water Quality Analyte List
Monitoring Program for the Prado Basin Habitat Sustainability Program

Analytes	Method
Major cations: K, Na, Ca, Mg	EPA 200.7
Major anions: Cl, SO_4, NO_2, NO_3	EPA 300.0
Total Hardness	SM 2340B
Total Alkalinity (incl. Carbonate, Bicarbonate, Hydroxide)	SM 2320B
Boron	EPA 200.7
Ammonia-Nitrogen	EPA 350.1
pH	SM 4500-HB
Specific Conductance	SM 2510B
Total Dissolved Solids	E160.1/SM2540C
Total Kjeldahl Nitrogen (TKN)	EPA 351.2
Organic Nitrogen	EPA 351.2
Turbidity	EPA 180.1
Total Organic Carbon	SM5310C/E415.3



Current and Historical Vegetation Monitoring Sites

- USBR Vegetation Monitoring Site
- OCWD Photo-Monitoring Site

Other Features

- Prado Flood Control Basin
- Chino Basin Desalter Authority Well
- PBHSP Monitoring Well
- OCWD Prado Wetlands
- Rivers and Streams

Aerial Photo: USDA, 2014. Mosaic of photo from May 13, 2014 to June 3, 2014

Prepared by:

WEI
WILDERMUTH ENVIRONMENTAL, INC.

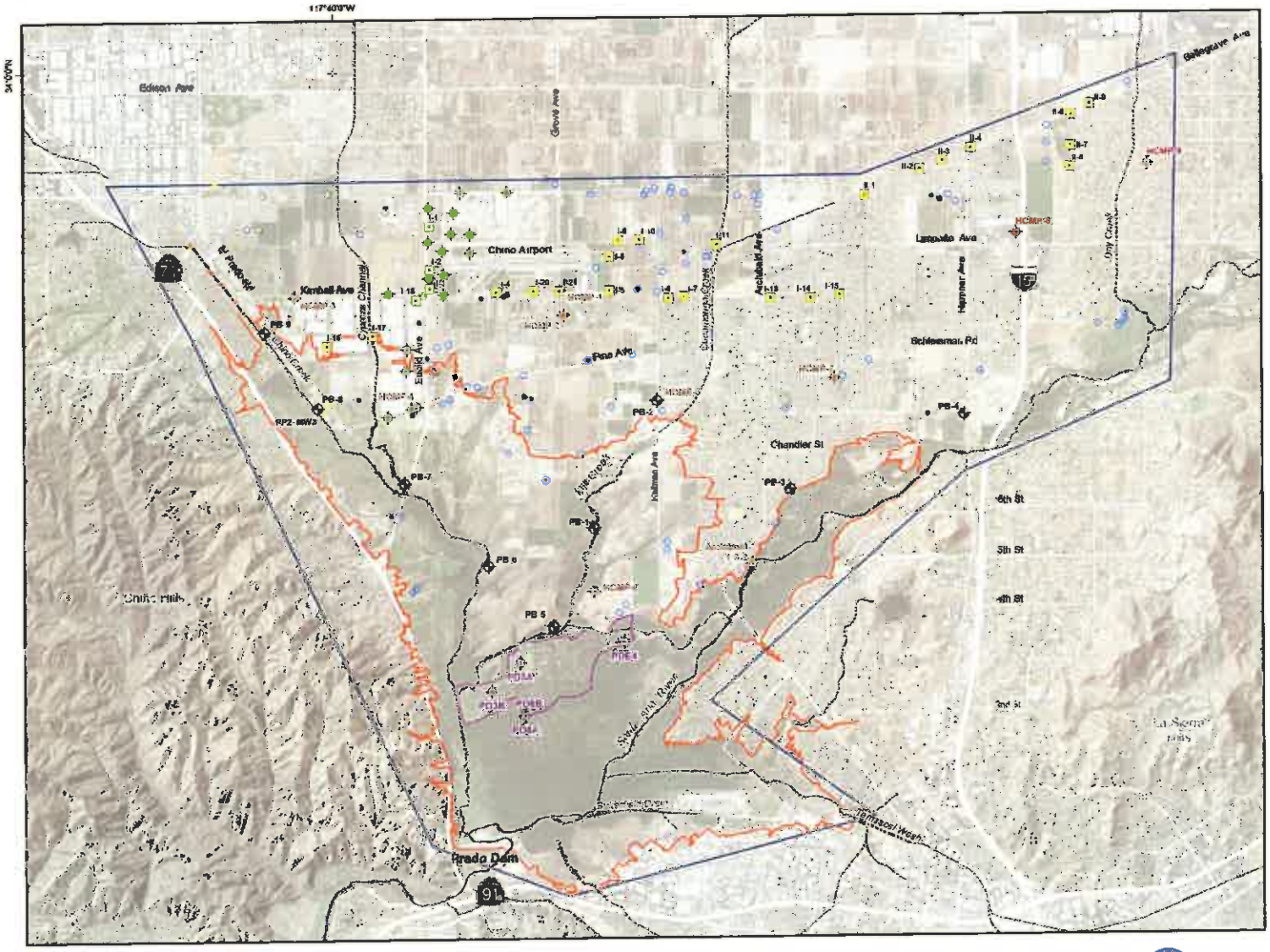
Author: TCR
Date: 4/28/2016
File: Figure A-1_Veg_slideshow

0 1 2 Miles
0 1 2 3 KM

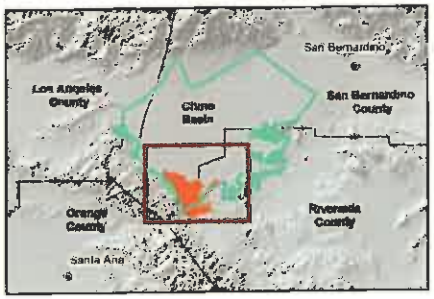
PBHSP 2016 Monitoring Program
Prado Basin Habitat Sustainability Committee

Current and Historical Vegetation Monitoring Sites in Prado Basin

Figure A-1



Aerial Photo: USDA, 2014. Mosaic of photos from May 13, 2014 to June 3, 2014



Prepared by:

WEI
WILDERMUTH ENVIRONMENTAL, INC.

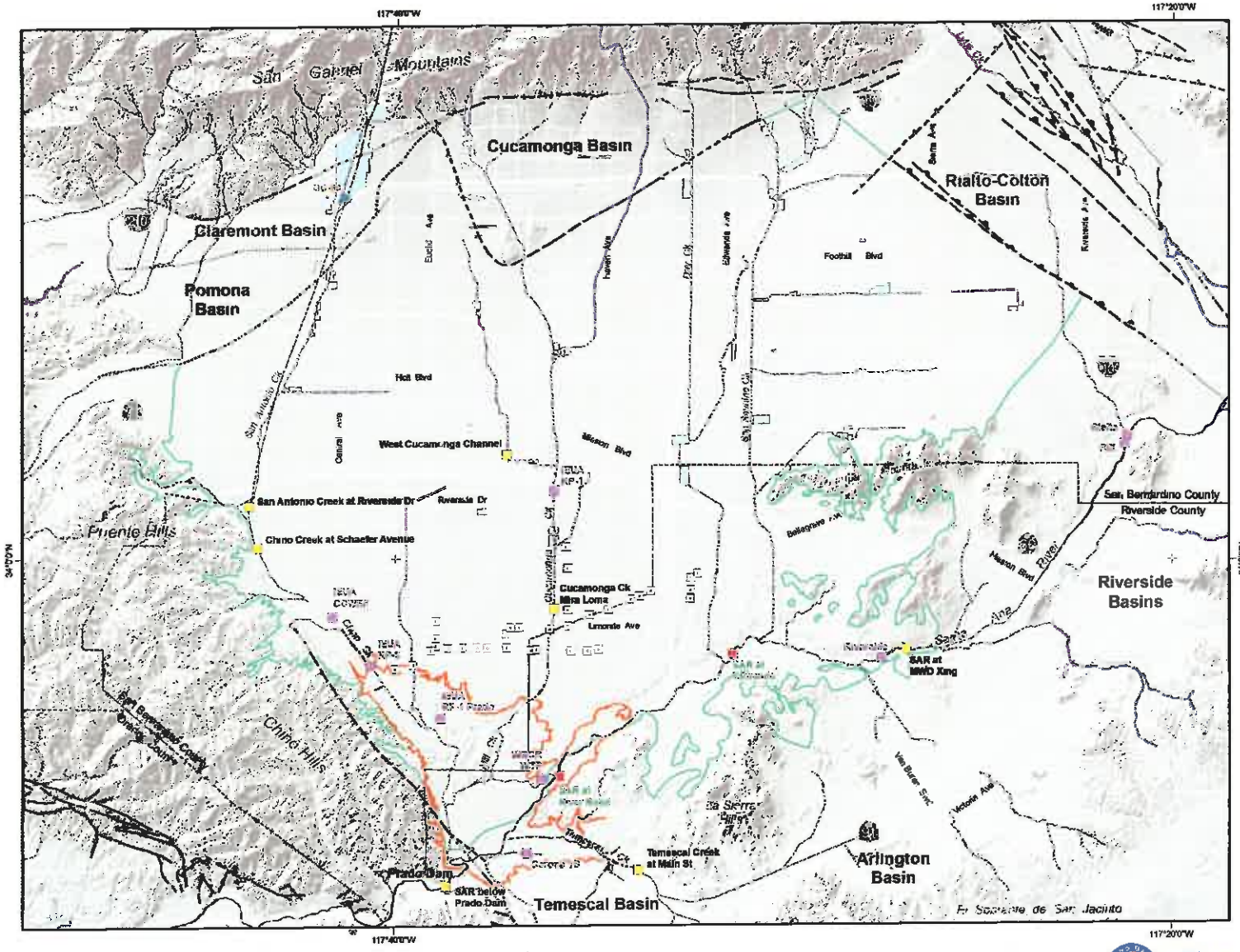
Author: TCR
Date: 4/28/2016
File: Figure A-2_Groundwaters_slideshow

0 1 2 Miles
0 1 2 3 KM

PBHSP 2016 Monitoring Program
Prado Basin Habitat Sustainability Committee

Groundwater Monitoring Program

Figure A-2



Surface-Water Monitoring Sites

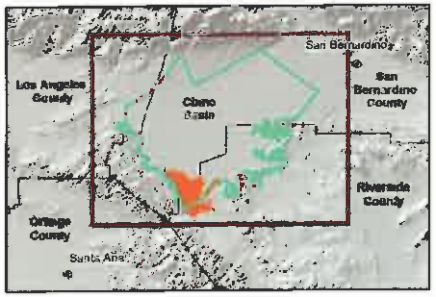
- POTW Discharge Outfall
- USGS Stream Gage Station
- Maximum Benefit Monitoring Program Site
- MWDSC Imported Water Turnout

Other Features

- Chino Basin Hydrologic Boundary
- Prado Flood Control Basin
- Rivers and Streams
- Flood Control & Conservation Basins
- Chino Basin Desalter Authority Well

Faults

- Location Certain
- Location Approximate
- Location Concealed
- Location Uncertain
- Approximate Location of Groundwater Barrier



Prepared by:

WEI
WESTERN ECOSYSTEMS TECHNOLOGY, INC.

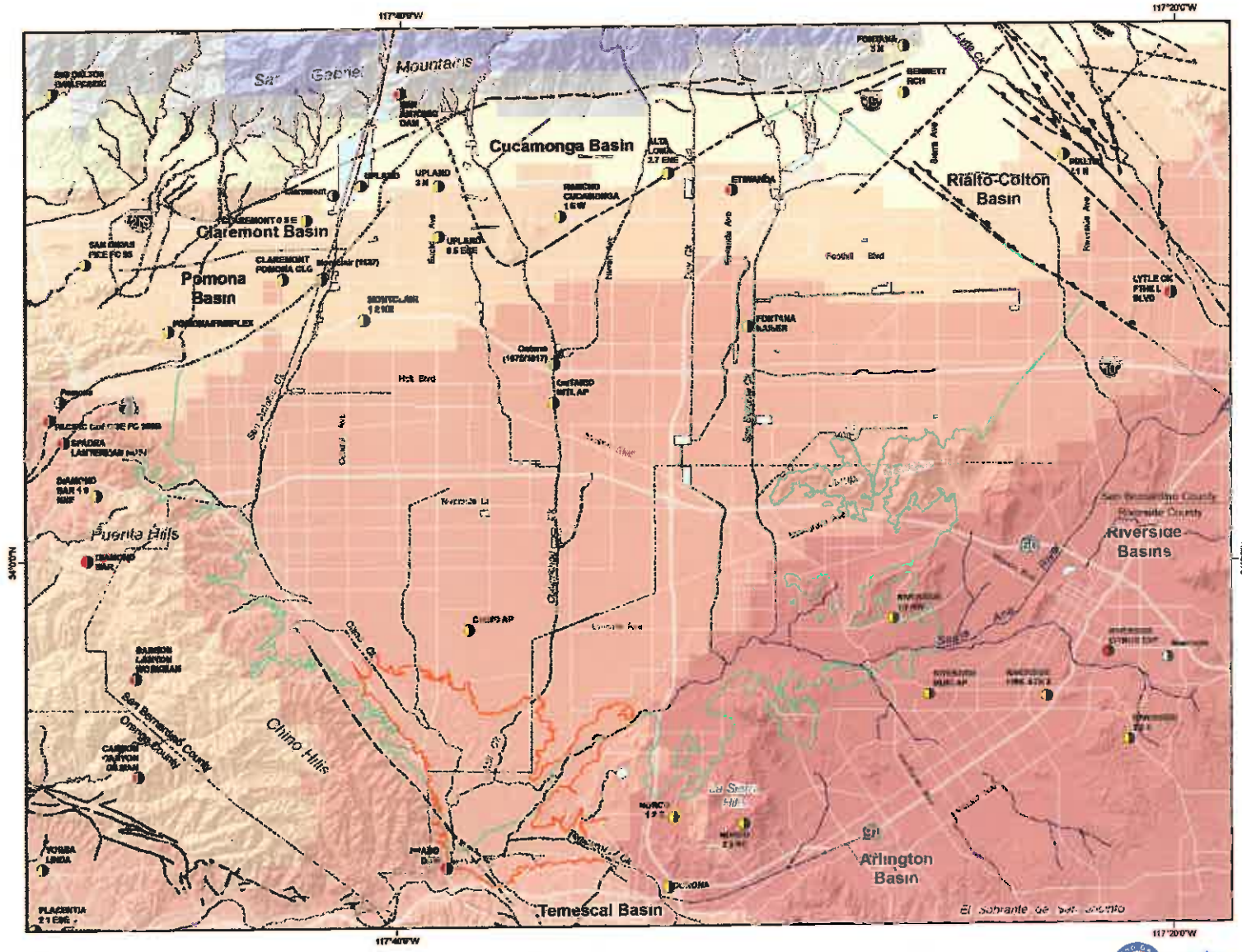
Author: TCR
Date: 4/25/2016
File: Figure A-3_SW

0 1 2 3 4 5 Miles
0 2 4 6 8 KM

PBHSP 2016 Monitoring Program
Prado Basin Habitat Sustainability Committee

Surface-Water Monitoring Program

Figure A-3



Climatic Monitoring Stations

- NWS Cooperative Observer Program
- Global Historical Climatology Network
- CIMIS
- SBCFCD Precipitation Station

Average Annual Precipitation for Water Year 2009-10 from PRISM Climate Group (inches, 800 x 800 meter grid)

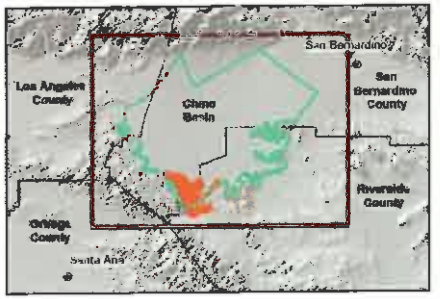
- <15
- 15 - 20
- 20 - 25
- 25 - 30
- 30 - 35
- >35

Other Features

- Prado Flood Control Basin
- Chino Basin Hydrologic Boundary
- Streams & Flood Control Channels
- Flood Control & Conservation Basins

Faults

- Location Certain
- Location Approximate
- Location Concealed
- Location Uncertain
- Approximate Location of Groundwater Barrier



Prepared by:

WEI
WILDERMUTH ENVIRONMENTAL INC.

Author: TOR
Date: 4/28/2016
File: Figure A-4_Climate_final

0 1 2 3 4 5 Miles
0 2 4 6 8 KM

PBHSP 2016 Monitoring Program
Prado Basin Habitat Sustainability Committee

Weather and Climate Monitoring Program

Figure A-4

Exhibit A

2016 Monitoring Program for the PBHSP

Riparian-Vegitation Monitoring

- USBR Vegetation Monitoring Site
- OCWD Photo-Monitoring Stations

Boundaries

- Groundwater Monitoring Program Study Area
- OCWD Prado Wetlands

Groundwater Monitoring

- Desalter Well
- HCMP Monitoring Well
- PBHSP Monitoring Well
- Chino Airport Monitoring Well
- OCWD Prado Wetlands Monitoring Well
- Public Well Monitored by CBWM for Groundwater Production, Levels, and/or Quality
- Private Well Monitored by CBWM for Groundwater Production, Levels, and/or Quality
- Active Production Well (water year 2015)

Surface-Water Monitoring Stations

- POTW Discharge Outfall
- USGS Stream Gage Station
- Maximum Benefit Monitoring Program Site

Climatic Monitoring Stations

- NWS Cooperative Observer Program
- Global Historical Climatology Network

Author TOR
Date 20160203
T:\tor\Exhibit_A.mxd

Prepared by:
WEI
Watermaster Environmental Info

2016 PBHSP Adaptive Management Plan
Prado Basin Habitat Sustainability Committee

2016 Monitoring Program for the PBHSP

Exhibit A

Appendix B

Comments and Responses

Appendix B

Comments and Responses
on the Draft 2016 Adaptive Management Plan for the Prado Basin Habitat Sustainability Program

B-1 Santa Ana Watershed Project Authority

Comment Number	Reference	Comment	Response
1	Appendix A, Section A.4	The draft AMP on page 2-1 states that some of the main factors that potentially can affect riparian habitat in the Study Area are weather events and long-term climate. It would increase the strength of the monitoring to establish an evapotranspiration monitoring station in or near the Study Area. There is a Department of Water Resources CIMIS station near Claremont/Pomona, but to rely on that station, an agency would need to use "spatial CIMIS" which the Department of Water Resources also manages. Spatial CIMIS is increasingly accurate when there are other stations located near each other. For the Claremont/Pomona Station, the nearby station would be in the City of Riverside. Spatial CIMIS relies on interpolation and interpolation accuracy is affected by the density of the CIMIS stations and geographic features of the region. Since there are few CIMIS stations near the Study Area, the accuracy of spatial CIMIS is reduced. A map of ET monitoring stations in the Santa Ana River Watershed is attached.	We agree that a CIMIS station at or near the Prado Basin would strengthen the weather/climate monitoring program. We recommend that the PBHSC discuss, and consider for recommendation, the construction of a CIMIS-type station at or near Prado Basin at a future meeting. No changes to the AMP text were made to address the comment.
2	Appendix A, Sections A.1 and A.4	There are private sector firms as well as publicly available satellite data that provide remote sensing data that can also be used. For example, Landsat satellite collects data related to vegetation coverage seen from its flight path. This vegetation coverage data can be used as part of a regression analysis creating a relationship to weather data that is collected in the field to the satellite data, thereby creating an estimated evapotranspiration rate value. Local professor Dr. Michael Goulden of UC Irvine has done this regression analysis before while analyzing the national forest.	Comment noted, but no changes to the AMP text were made to address this comment. As stated in Section A.1 "...the RHMP [Riparian Habitat Monitoring Program] as described herein is conceptual, and is referred to as the 'Conceptual RHMP'." That said, analysis of remote-sensing data to detect changes in the extent and quality of the riparian habitat is contemplated in the AMP. The RHMP is currently being collaboratively developed by the Watermaster, IEUA, and OCWD. Analysis of remote-sensing data will be assessed for its possible use in the PBHSP, and incorporated into the

Comment Number	Reference	Comment	Response
			monitoring program as appropriate.
4	Appendix A, Section A.4	Evapotranspiration rate monitoring also has the benefit of assisting retail water agencies who want to pursue or adopt a rate structure that accounts for weather. This also seems to be the direction the State is moving in per Governor Brown's Executive Order released on Monday. One of the stipulations in the Executive Order is for the Department of Water Resources and the State Water Board to develop a standard for "outdoor irrigation, in a manner that incorporates landscape area, local climate, and new satellite imagery data." If you have any questions about evapotranspiration rate monitoring data please contact me and I would be happy to help.	Comment noted, and thank you.
5	Appendix A, Section A.1	The Monitoring Program, Attachment A, also discusses regional assessments using periodic mapping. SAWPA has acquired 3-inch resolution color imagery and infrared digital orthophotography through a summer 2015 flight survey (survey area attached). The Corps of Engineers is also mapping the River and major tributaries through the Coordinated Ground Truth and Airborne Hyperspectral and Topographic Lidar Survey Project through a 2015 flight survey. The flight path for that survey is attached. The SAWPA data as well as the Corps data should be available this year. Our GIS staff has been in contact with Gary Te at IEUA for the SAWPA data.	Comment noted, but no changes to the AMP text were made to address this comment. As stated in Section A.1 "...the RHMP [Riparian Habitat Monitoring Program] as described herein is conceptual, and is referred to as the 'Conceptual RHMP'." That said, analysis of air photos to detect changes in the extent and quality of the riparian habitat is contemplated in the AMP. The RHMP is currently being collaboratively developed by the Watermaster, IEUA, and OCWD. Data currently being collected by stakeholders will be assessed for its possible use in the PBHSP, and incorporated into the monitoring program as appropriate.

ACTION ITEM 1F

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Date:	September 21, 2016
To:	The Honorable Board of Directors
Through:	Public, Legislative Affairs, and Water Resources Committee (*09/14/16*)
From:	P. Joseph Grindstaff General Manager
Submitted by:	Chris Berch CB Executive Manager of Engineering/Assistant General Manager Sylvie Lee CB for SL Manager of Planning and Environmental Resources
Subject:	Imported Water Service Connection Shared Use Agreement

RECOMMENDATION

It is recommended that the Board of Directors:

1. Approve the Imported Water Service Connection Shared Use Agreement with Western Municipal Water District; and

2. Authorize the General Manager to execute the agreement.

BACKGROUND

Inland Empire Utilities Agency (IEUA) and Western Municipal Water District (WMWD) have service area boundaries located within the Santa Ana River watershed. Portions of the two service areas overlie the Chino Groundwater Basin (Chino Basin). The Chino Basin is one of the largest subsurface storage aquifers in Southern California and has the potential to store large volumes of water for local and regional use. Currently, WMWD does not have the ability to purchase or deliver water from the Metropolitan Water District (MWD) into the Chino Basin.

In an effort to increase flexibility in groundwater basin management, maximize the utilization of imported water and provide additional regional water supplies in both service areas, IEUA and WMWD seek to develop an agreement that defines the facilities and the operational terms for shared use of IEUA connections to the MWD imported water system.

The MWD Administrative Code provides that MWD will not deliver water at the request of one member agency into the territory of another member agency without written agreement and

authorization from all affected member agencies. Both IEUA and WMWD are MWD member agencies.

WMWD use of IEUA connections to the MWD system would require WMWD to submit a request 90 days in advance and would be subject to approval by IEUA. WMWD use is limited to unused service connection capacity, and IEUA reserved the right to pre-empt and interrupt as needed. Although the primary intent of the agreement is to allow WMWD to make imported water deliveries to the Chino Basin via replenishment connections, in-lieu deliveries may be arranged in the future. The agreement would also support IEUA's participation in the Santa Ana River Conservation and Conjunctive Use Program (SARCCUP). The agreement is set to terminate on December 31, 2035, unless an extension is executed.

The Shared Use Agreement is consistent with the Agency's business goal of *Water Reliability,* to enhance water supplies within the region.

PRIOR BOARD ACTION

None.

IMPACT ON BUDGET

None

Attachments: Shared Use Agreement

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

WESTERN MUNICIPAL WATER DISTRICT

SEPTEMBER 2016
SHARED USE AGREEMENT OF CHINO BASIN TURNOUTS
FOR CONVEYANCE OF METROPOLITAN WATER DISTRICT WATER

This Shared Use Agreement ("Agreement") is made as of the ____ day of September, 2016, by and between the Inland Empire Utilities Agency, a Municipal Water District, (hereinafter "IEUA"), and the Western Municipal Water District, a Municipal Water District, (hereinafter "WMWD"). IEUA and WMWD are hereinafter collectively referred to as the Parties or individually as a Party.

RECITALS

WHEREAS, IEUA and WMWD are Member Public Agencies to the METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA (hereinafter, "MWD") and by agreement have the ability to purchase imported water from the MWD; and

WHEREAS, IEUA and WMWD desire to enter into this Agreement to initiate use of MWD Service Connections to increase flexibility in basin management and regional water supplies; and

WHEREAS, portions of the service areas of both WMWD and IEUA are located within the area commonly known as the Santa Ana River Watershed. Portions of the Watershed overlie the Chino Groundwater Basin ("Chino Basin"). The Chino Basin is one of the largest subsurface storage aquifers in Southern California and has the potential to store large volumes of water for local and regional use; and

WHEREAS, WMWD desires to take delivery of MWD water for replenishing groundwater in the Chino Basin. The MWD Service Connections operated by IEUA, which will be utilized for the WMWD deliveries contemplated herein, are identified as follows: CB-7, CB-11, CB-12, CB-13, CB-14, CB-15, CB-16, CB-18, CB-19 and CB-20 (collectively referred to herein as "Service Connections"); and

WHEREAS, in order for WMWD to take delivery of MWD water through the Service Connections, the Parties are required to make a formal request to MWD. Section 4205 of the MWD Administrative Code provides that MWD will not deliver water at the request of one Member Public Agency into the territory of another Member Public Agency without written agreement and authorization from all affected Member Public Agencies; and

NOW, THEREFORE, in consideration of the facts set forth hereinabove, and the terms, conditions and covenants set forth hereinafter, the parties do herby agree as follows:

SECTION 1. REQUEST FOR DELIVERIES

WMWD shall submit a written Notice of Intent ("NOI") at least ninety (90) calendar days prior to the date of a requested delivery. The NOI shall include the following information:

(a) The requested quantity of water to be purchased from MWD by WMWD;
(b) The Service Connection(s) to be used for the delivery of MWD water;
(c) The requested schedule for delivery; and
(d) Any other information regarding delivery and storage into the Chino Basin,

SECTION 2. RESPONSE FROM IEUA

Within thirty (30) days from receipt of the NOI, IEUA shall determine, in its reasonable discretion, whether to authorize or decline the request. In the event the request is authorized, IEUA shall provide information to WMWD including, but not necessarily limited to, the approved quantity and the schedule for delivery. In the event the requested delivery is declined, IEUA shall provide information to WMWD including, but not necessarily limited to, the reasons for declining the requested delivery and/or alternative proposals for the quantity and delivery schedule that IEUA would be willing to authorize. The Parties shall engage in reasonable good faith efforts to agree upon the terms of a mutually acceptable NOI. In addition, the Parties agree to cooperate and coordinate the shared use of the Service Connections.

SECTION 3. RIGHTS AND OBLIGATIONS

Any unused Service Connection capacity may be utilized by WMWD for the purposes set forth herein. WMWD will be responsible, at its sole cost and expense, for complying with all requirements for communications, coordination, notices, permissions, water accounting, permitting and related actions as needed for the water deliveries and diversions implemented under this Agreement. WMWD will take possession, full obligation and responsibility for all water delivered hereunder, including water that may be lost or not diverted from the Service Connections or receiving facilities for recharge into the Chino Basin. Upon forty-eight (48) hours prior written notice to WMWD, IEUA may pre-empt and interrupt requested deliveries in order to take its own MWD deliveries through said Service Connections.

SECTION 4. RATES AND CHARGES

Neither Party shall charge, nor pay, to each other any amounts for the performance of this Agreement including but not limited to, the water supplies, deliveries, and storage of water as contemplated herein. Each Party shall be responsible for their respective water rates

and charges imposed by MWD for the respective Party's purchases and deliveries from MWD. It is hereby acknowledged and agreed that the sole consideration for each Party to enter into this Agreement includes the interests of each Party in utilizing MWD facilities and water resources to increase flexibility in basin management and regional water supplies and to store large volumes of water in Chino Basin for local and regional benefits.

SECTION 5: EFFECTIVE DATE

This Agreement shall be effective from the date of execution of this Agreement by both Parties and terminate on December 31, 2035, unless a mutually-agreed-to extension is executed, which shall be made by written amendment to this Agreement.

SECTION 6: MUTUAL INDEMNIFICATION

Each Party agrees to protect, defend, indemnify and hold harmless the other party and its officers, directors, agents, employees, servants, and volunteers from any and all liability, claims, judgments, costs and demands, including demands arising from injuries or death of persons and damage to property, occurring as a result of its own or its respective officers, directors, agents, employees, servants, volunteers or subcontractor's wrongful or negligent acts or omissions in performing or failing to perform this Agreement. Each Party shall be responsible to the extent of their negligence.

Each Party further agrees to investigate, handle, respond to, provide defense for and defend any such claims, demands or suit required hereunder at their sole expense.

SECTION 7: OBSERVING LAWS AND ORDINANCES

The Parties shall keep fully informed of all existing state and federal laws and all county and city ordinances and regulations which in any manner affect the conduct of any services or tasks performed under this Agreement and of all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the same. The Parties shall at all times observe and comply with all such existing laws, ordinances, regulations, requirements, orders and decrees, and shall protect and indemnify, as required herein, the other Party hereto, its officers, employees and agents against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order or decree, whether by the their contractors or its employees.

SECTION 8: DISPUTE RESOLUTION

The Parties shall seek to resolve any dispute concerning the interpretation or implementation of this Agreement through good faith negotiation, involving, as and when appropriate, the general manager or chief executive officer of each of the Parties. Any dispute that remains unresolved thirty days (30) days after notice of the dispute is made to the Parties, shall be resolved by a single arbitrator with substantial experience in the matter or matters in dispute, conducted in accordance with Judicial Arbitration and Mediation

Services (JAMS). The JAMS arbitrator shall apply the American Arbitration Association's rules on commercial disputes, which shall govern any arbitration. If the Parties cannot agree on a single arbitrator within ten (10) days of the written election to submit the matter to arbitration, any Party may request JAMS to appoint a single, neutral arbitrator. The Parties shall use their reasonable best efforts to have the arbitration proceedings concluded within ninety (90) business days of selection of the arbitrator.

SECTION 8: NOTICE

Written notices to be given to any Party must be given by personal delivery or by registered or certified mail addressed and delivered as set forth below. Other correspondence and invoices may be sent by first-class mail, addressed and delivered as set forth below:

Inland Empire Utilities Agency
6075 Kimball Avenue
Chino, CA 91708
Attention: General Manager

Western Municipal Water District
14205 Meridian Parkway
Riverside, CA 92518
Attention: General Manager

SECTION 9: RIGHT TO AUDIT

The Parties reserve the right to review and/or audit all records related to this Agreement. The option to review and/or audit may be exercised during the term of the Agreement, upon termination, or at any time up to twelve (12) months after termination of the Agreement. The Parties shall make all records and related documentation available within a timely manner not to exceed thirty (30) calendar days after the information is requested.

SECTION 10: TERMINATION FOR CONVENIENCE

Each party reserves and has the right to immediately suspend, cancel or terminate this Agreement at any time upon one hundred twenty (120) calendar days prior written notice to the other Party. In the event of such termination, each Party shall pay any amount owed for all authorized costs or any obligations hereunder up to the date of such termination.

SECTION 11: REPRESENTATION OF AUTHORITY

Each Party represents to the other that it has the authority to enter into this Agreement and that the individual signing this Agreement on behalf of their respective Party has the authority to execute this Agreement and to bind their respective Party to the terms and conditions of this Agreement.

SECTION 12: GOVERNING LAW

This Contract is to be governed by and constructed in accordance with the laws of the State of California in the County of San Bernardino.

SECTION 13: INCORPORATION OF RECITALS

The Recitals set forth above are incorporated herein and made a part of this Agreement.

SECTION 14: ENTIRE AGREEMENT

This Agreement is intended by the Parties as a complete and exclusive statement of the terms of their agreement and it supersedes all prior agreements, written or oral, as to this subject matter. This Agreement may be modified only upon the mutual written agreement of the Parties.

IN WITNESS WHEREOF, each of the Parties has caused this Agreement to be executed by its respective duly authorized officers. The effective date of this Agreement shall be the in accordance with the terms of this Agreement.

Executed this ___ day of September, 2016 by:

INLAND EMPIRE UTILITIES AGENCY:	WESTERN MUNICIPAL WATER DISTRICT:
P. Joseph Grindstaff General Manager	John V. Rossi General Manager

Imported Water Service Connection Shared Use Agreement

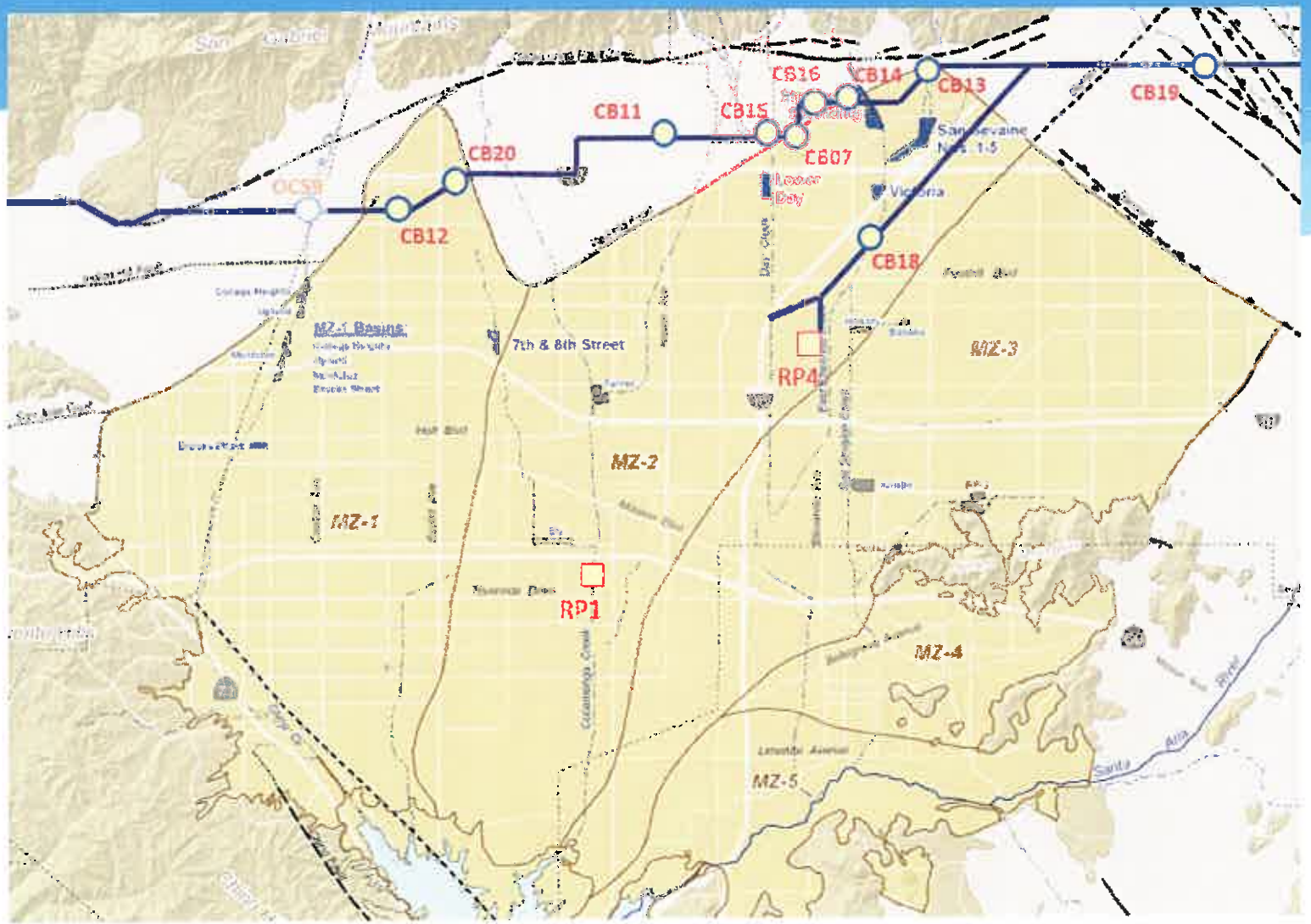
Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

IEUA Board of Directors Meeting
September 2016

Background

- IEUA & Western Municipal Water District (WMWD) overlie the Chino Basin.
- WMWD desires access to IW service connections in the Chino Basin for replenishment.
- MWD requires written agreement between affected MWD Member Agencies.
  - Allows MWD to administer rates and charges directly to WMWD for water delivered through an IEUA service connection.
    - Only applicable to water requested by WMWD

IEUA IW Service Connections



Recommendation

Staff recommends that the Board of Directors approve the Agreement for shared use of IEUA's imported water service connections, and authorize the General Manager to execute the agreement.

The Agreement is consistent with the IEUA business goal of ***Water Reliability*** by enhancing and providing additional water supply into the region.

ACTION ITEM 1G

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Date:	September 21, 2016
To:	The Honorable Board of Directors
Through:	Public, Legislative Affairs, and Water Resources Committee (*09/14/16*)
From:	P. Joseph Grindstaff General Manager
Submitted by:	Chris Berch Executive Manager of Engineering/Assistant General Manager
	Sylvie Lee Manager of Planning and Environmental Resources
Subject:	Adoption of Resolution for Tier 1 Allocations for Purchase of Imported Water

RECOMMENDATION

It is recommended that the Board of Directors approve Resolution 2016-9-1, establishing allocations for the purchase of imported water within the IEUA service area.

BACKGROUND

On December 17, 2014, the Inland Empire Utilities Agency (IEUA) Board of Directors approved Resolution 2014-12-1. The Resolution establishes the amount of imported water that an IEUA Member Agency can purchase at the lower Tier 1 Supply Rate set by the Metropolitan Water District (MWD). Individual wholesale Tier 1 allocations for the Cucamonga Valley Water District (CVWD), the Water Facilities Authority (WFA) and Fontana Water Company (FWC) are shown in Table 1.

Per Resolution 2014-12-1, each agency's Tier 1 allocation applies to water purchases for each fiscal year. As shown in Table 1, the cumulative Tier 1 allocation between the CVWD, WFA and FWC is 69,752 acre-foot (AF) per fiscal year. Water purchases in excess of the Tier 1 allocation will be assessed at the Tier 2 rate.

Table 1 – Tier 1 supply rate allocations for the purchase of imported water:

Agency	Tier 1 Allocation (Acre-Foot per Year)
Water Facilities Authority	31,384
Cucamonga Valley Water District	28,368
Fontana Water Company	10,000
Wholesale Tier 1 Allocation	**69,752**
IEUA/Chino Basin Watermaster(1)	23,531
Purchase Order Tier 1 Allocation	**93,283**

(1) Annual average allocation based on historical MWD purchases.

On January 1, 2015, IEUA executed a new Purchase Order (PO) agreement with the MWD. The new agreement provides the ability to carry forward unused Tier 1 allocation through the term of the PO, which terminates on December 31, 2024. The PO allows IEUA to secure up to 932,830 AF of water at the Tier 1 Supply Rate, or an annual average of 93,283 AF per year. It also requires that a minimum volume of 398,350 AF of water, or an annual average of 39,835 AF per year be purchased during the term of the PO.

In an effort to maximize imported water purchases during periods when increased imported water supply is available, it is being proposed that IEUA develop a protocol to carryforward unused Tier 1 water. The amount of additional water available for purchase at the Tier 1 rate, referred to as carryforward water, would be determined annually by IEUA and would only be available for purchase in the following fiscal year. Carryforward water purchased by a Member Agency will not adjust a Member Agency's Tier 1 allocation set by Resolution. Each year, IEUA staff will submit correspondence to the three agencies identifying the amount of carryforward water available, along with a request for interest to purchase.

During fiscal year 2015-16, cumulative sales between the three agencies was 29,441 AF. If approved, the amount of carryforward water that could be made available in fiscal year 2016-17 is 40,311 AF. As noted, this amount of carryforward water would only be available for purchase by a Member Agency during the fiscal year 2016-17 period.

To provide this benefit to IEUA Member Agencies, staff recommends Section 5 be incorporated to amend Resolution 2014-12-1:

- Section 5. CARRYFORWARD OF TIER 1 WATER – Additional imported water at the Tier 1 rate can be made available to each Member Agency. The amount of additional water, referred to as carryforward water, will be determined annually by IEUA and subject to availability by the MWD. Carryforward water purchased by a Member Agency will not count towards their Tier 1 allocation identified in Section 2.

All other provisions of Resolution 2014-12-1 remain unchanged. To account for these revisions and upon approval, Resolution 2016-9-1 has been developed and shall supersede Resolution 2014-12-1.

On July 28, 2016, staff submitted via email the amount of carryforward water potentially available for purchase in fiscal year 2016-17. On August 8, 2016, the FWC response was a request to purchase 2,000 AF of carryforward water. This was the only purchase request received from IEUA Member Agencies for carryforward water during the fiscal year 2016-17 period.

Resolution 2016-9-1 is consistent with the Agency's business goal of *Water Reliability,* to enhance water supplies within the region.

PRIOR BOARD ACTION

On December 17, 2014, the Board of Directors approved Resolution 2014-12-1 establishing allocations of imported water from MWD.

IMPACT ON BUDGET

None.

Attachments: Resolution 2016-9-1

RESOLUTION NO. 2016-9-1

RESOLUTION OF THE BOARD OF DIRECTORS OF THE INLAND EMPIRE UTILITIES AGENCY* (IEUA), SAN BERNARDINO COUNTY, CALIFORNIA, ESTABLISHING ALLOCATIONS FOR THE PURCHASE OF IMPORTED WATER WITHIN IEUA SERVICE AREA

RECITALS

WHEREAS, IEUA has Ordinance No. 104 which establishes classes of water services and regulates the sale and delivery of imported water within IEUA's service area; and

WHEREAS, IEUA has a long-term agreement with the Metropolitan Water District of Southern California (MWD) for the purchase of imported water at a Tier 1 rate; and

WHEREAS, IEUA previously entered into agreements with its member agencies to purchase said allocation of IEUA's supply of MWD imported water at the Tier 1 rate; and

WHEREAS, these previous agreements expired on December 31, 2014, and IEUA desires to establish the Tier 1 allocation limits by this Resolution.

NOW, THEREFORE, the Board of Directors hereby RESOLVES, DETERMINES AND ORDERS the following to be effective January 1, 2015:

Section 1. IEUA is able to purchase 93,283 acre-feet per year (AFY) of imported water from Metropolitan Water District (MWD) at the Tier 1 rate through December 31, 2024. IEUA's allocation from MWD may be periodically adjusted by MWD.

Section 2. Each member agency's Tier 1 allocation shall apply to water purchases in the aggregate for any Fiscal Year, and are less than or equal to the following allocations. The allocations below do not confer a contractual right to MWD imported water. Water purchases in excess of the Tier 1 allocation will be assessed at the Tier 2 rate.

Tier 1 allocation for the purchase of imported water:

Water Facilities Authority	31,384	AFY
Cucamonga Valley Water District	28,368	AFY
Fontana Water Company	10,000	AFY

Section 3. The difference between IEUA's Tier 1 allocation per Section 1 and the member agency allocations per Section 2 will be available to IEUA and/or the Chino Basin Watermaster.

Section 4. MWD WATER SUPPLY ALLOCATION PLAN (WSAP) - Reduced imported water supplies caused by the adoption of a WSAP will reduce a member agencies Tier 1 imported water allocation as identified in Section 2 above. Revised allocations will be determined by historical deliveries taken during the base periods, as established by the WSAP.

Section 5. CARRYFORWARD OF TIER 1 WATER – Additional imported water at the Tier 1 rate can be made available to each Member Agency. The amount of additional water, referred to as carryforward water, will be determined annually by IEUA and subject to availably by the MWD. Carryforward water purchased by a Member Agency will not count towards their Tier 1 allocation identified in Section 2.

ADOPTED this 21st day of September, 2016.

_____
Terry Catlin
President of the Inland Empire Utilities Agency*
and of the Board of Directors thereof

ATTEST:

_____
Steven J. Elie
Secretary/ Treasurer of the Inland Empire
Utilities Agency* and of the Board of
Directors thereof

*a Municipal Water District

STATE OF CALIFORNIA)
)SS
COUNTY OF SAN BERNARDINO)

I, Steven J. Elie, Secretary/Treasurer of the Inland Empire Utilities Agency*, DO HEREBY CERTIFY that the foregoing Resolution being No. 2016-9-1, was adopted at a regular meeting on September 21, 2016, of said Agency* by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

Steven J. Elie
Secretary/Treasurer

(SEAL)

* A Municipal Water District

Resolution for Establishing Allocations for the Purchase of Imported Water

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

IEUA Board of Directors Meeting
September 2016

Background

- Establish each wholesale agency's Tier 1 allocation by Resolution (2014-12-1)

Agency	Tier 1 Allocation (Acre-Foot per Year)
Water Facilities Authority	31,384
Cucamonga Valley Water District	28,368
Fontana Water Company	10,000
Wholesale Tier 1 Allocation	**69,752**

- IEUA's Purchase Order with MWD provides the ability to "carryforward" unused Tier 1 allocation
- 2014-12-1 does not include this provision to provide benefit to IEUA agencies

Proposed changes

- Amend Resolution 2014-12-1 as follows:

Section 5:

CARRYFORWARD OF TIER 1 ALLOCATION *– Additional imported water at the Tier 1 rate can be made available to each Member Agency. The amount of additional water, referred to as carryforward water, will be determined annually by IEUA and subject to availability by the MWD. Carryforward water purchased by a Member Agency will not count towards their Tier 1 allocation identified in Section 2.*

- All other provisions of Resolution 2014-12-1 remain unchanged

Recommendation

Staff recommends that the Board of Directors adopt Resolution 2016-9-1 to supersede Resolution 2014-12-1.

The Resolution is consistent with the IEUA business goal of ***Water Reliability,*** to enhance water supplies within the region.

Public, Legislative Affairs, and Water Resources Committee

INFORMATION ITEM 2A

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Date:	September 21, 2016
To:	The Honorable Board of Directors
Through:	Public, Legislative Affairs and Water Resources Committee *(9/14/16)*
From:	P. Joseph Grindstaff General Manager
Submitted by:	Kathy Besser Manager of External Affairs
Subject:	Public Outreach and Communication

RECOMMENDATION

This is an informational item for the Board of Directors to receive and file.

BACKGROUND

September

- September 14, Chino Day at the LA County Fair
- September 16, Fontana and Ontario Day at the LA County Fair
- September 22, Upland and Montclair Day at the LA County Fair
- September 23, Chino Hills and Rancho Cucamonga Day at the LA County Fair

October

- October 20, Battery Storage Project Dedication, RP-5, 11 a.m.
- October 29, Landscape and Water Conservation Festival, Chino Basin Water Conservation District - 4594 San Bernardino St, Montclair, CA 91763, 9 a.m. – 2 p.m.

December

- December 21, IEUA Holiday Luncheon, Los Serranos Country Club, 15656 Yorba Avenue, Chino Hills, 11:30 a.m.

Outreach/Education - Civic Publications Newspaper Campaign

- IEUA is working with Civic Publications to update the KickWaterWaste.com micro-site.

Media and Outreach

- IEUA was awarded the H_20 Collaboration Award at the BIA San Bernardino County Water Conference for the *Kick the Habit* campaign.
- Staff will be distributing a new fall message during the upcoming season. The message will align with the *Kick the Habit* brand and will include a fall theme. The tips focus on the State Water Resources Control Board's permanent restrictions following the Governor's Executive Order.
- Staff will be updating the movie trailer to tie into fall messaging. The *Kick the Habit* movie trailer will continue to show in local theaters.
- A *Kick the Habit* ad ran in the *Champion Newspaper's* High School Football section on August 20.
- A *Kick the Habit* ad will run in the *Champion Newspaper's* L.A. County Fair section on September 24.
- *Kick the Habit* bus advertisements in English and Spanish began on October 5, 2015 for an initial six month run and will continue to run for another six months. The ads are updated to include the summer messaging tips. These advertisements will end on September 22.
- In August, 32 items were posted to Facebook and 28 tweets were sent under the @IEUAwater Twitter handle.
- Staff is working on developing/updating all facility brochures.

Education and Outreach Updates

- Staff has begun working on marketing and scheduling Water Discovery field trips for program year 2016/17. To date, staff has scheduled four field trips and one educator's field trip with teachers from Fontana Unified School District.
- Staff has begun scheduling outreach/program meetings with principals within the service area for school year 2016/17. To date, staff has schedule a principal meeting at Etiwanda School District on August 30 to communicate IUEA's free education programs.
- Staff has submitted to MWD the 2017 Solar Cup Interest to Participate form to sponsor three teams. Teams will need to be identified by Thursday, September 7, 2016. Staff has received interest from five schools within the service area including: Chino High School (Chino), Chino Hills High School (Chino Hills), Los Osos High School (Rancho), Henry J. Kaiser High School (Fontana), and Jurupa Hills High School (Fontana). Schools will be entered in a lottery drawing to determine team slots as staff as received more interest than allotment provided by MWD.
- Staff is working in cooperation with Chino Basin Water Conservation District and member agency representatives to plan the Landscape Water Conservation Festival held annually in October. The Water Conservation Fair will be held Saturday, October 29, 2016.
- Staff has awarded four schools the Garden in Every School® water-wise grant for program year 2016/17. Schools awarded include: Arroyo Elementary in Ontario, Rolling Ridge Elementary in Chino Hills, Townsend Junior High School in Chino Hills, and Montclair High School in Montclair. Staff has begun conducting site inspections to determine prep-work, establish a design and schedule an installation timeline.

PRIOR BOARD ACTION

None.

IMPACT ON BUDGET

The above-mentioned activities are budgeted in the FY 2016/17 Administrative Service Fund, External Affairs Services budget.

Public, Legislative Affairs, and Water Resources Committee

INFORMATION ITEM 2B

Innovative Federal Strategies LLC
Comprehensive Government Relations

MEMORANDUM

To: **Joe Grindstaff and Kathy Besser, IEUA**

From: **Letitia White, Jean Denton, and Drew Tatum**

Date: **August 31, 2016**

Re: **August Monthly Legislative Update**

Appropriations Update

Even as public momentum continues to build for a 6-month continuing resolution (CR), there is a strong push behind the scenes for a funding measure that only runs through mid-December. Senior Members on the House Appropriations and Armed Services Committees, in concert with several of their colleagues, are drafting a letter to House Leadership advocating strongly for a 3-month CR with the intent of ending the year with some combination of stand-alone, "minibus" and/or omnibus bills to complete annual appropriations and other key legislation. The prevailing wisdom is that leadership on both sides will want to hold the CR until the very end of September to keep pressure on the process to move as much legislation as possible right up to the end of the fiscal year.

To that end, we are hearing that the Senate intends to make another attempt at bringing Defense Appropriations to the floor in September. As you may recall, Senate Republicans attempted to advance the legislation multiple times before the break, but were unable to garner the 60 votes necessary to invoke cloture. The planned Senate action on an individual appropriations bill means that little progress has been made on mediating out appropriations conference positions during the recess. Regardless of the outcome, we expect staff will start conferencing appropriations positions either after the legislation passes, or barring that, when Members return to the campaign trail in October.

During the recess, the Office of Management and Budget dealt a major blow to the individual appropriations bills advanced by the House Appropriations Committee. In its mid-year assessment, the OMB reported that the 12 annual spending bills in the House would violate the discretionary spending caps set by law and require a new round of sequestration if enacted. The report noted that based on the spending levels contained in the legislation, defense programs would need to be cut by $17 million and non-defense programs would face $775 million in cuts. The Senate bills, by contrast, would fall under the discretionary spending limit by $2.2 billion.

Administration Calls for Supplemental Appropriations Bill for Zika, Flooding, Troops

The Administration has crafted a supplemental appropriations request totaling between $6 and $7 billion that is expected to be transmitted to Congress in early September. As you will remember, the Zika supplemental previously submitted to Congress was not approved as part of an

appropriations package before Congress left town over objections to how Republicans offset nearly half of the spending. The new supplemental request is likely to be split roughly in half between both domestic spending—for Zika response and Louisiana flood relief—and defense—to cover the additional costs for the troop levels in Afghanistan. Committees hope to take action before the end of September, with the package possibly serving as the legislative vehicle for a continuing resolution to fund the government beyond September 30.

In addition to calling for supplemental funding to address the Zika virus in the United States, the Food and Drug Administration has issued a new advisory recommending all U.S. blood banks screen donated blood for the Zika virus. Announced on Friday, August 26, this is a major expansion of the screening procedures. Previously, the requirement was limited to areas with active Zika transmissions.

Outlook for September

With only 4 weeks remaining until the end of the current fiscal year, Congress will have to decide how long to enact a continuing resolution to avoid a government shutdown. The House is scheduled to recess through the election by September 30, leaving 17 scheduled days in session for the month. The Senate is scheduled to be in session during the first week of October, but all spending decisions will have to be made before the House leaves Washington.

Aside from passing a continuing resolution, the House has set forth an ambitious agenda for September. In an email to his colleagues on August 31, House Majority Leader Kevin McCarthy (R-CA) put forth the following items:

- Better Way Agenda:
  While largely a legislative blueprint for the next Congress, the House will likely consider legislation under the theme of rebalancing the separation of powers. Specifically, the House is scheduled to consider the Regulatory Integrity Act that requires agencies to publish information about proposed regulations on their website, a bill to allow Congress to disapprove of "Midnight Regulations" issued in an administration's lame duck term, and legislation that would prohibit major rulemaking that cost more than $1 billion from going into effect until pending legislation against the rule is finalized.
- Innovation:
  The House will consider legislation to accelerate private sector innovation and encourage the same within government.
- Iran:
  The House is expected to consider a number of measures related to anti-terrorism and Iran. Specifically, the House will hold multiple hearings on the $400 million in cash paid to Iran as part of a settlement agreement. During August, the administration admitted to withholding it as leverage until hostages were released, leading many to criticize it as a ransom payment. Additionally, the House will consider legislation that would require reporting on the financial assets acquired by Iranian leaders.
- Appropriations:
  In addition to finalizing a continuing resolution, the House may also consider a new supplemental appropriations request that would provide emergency funding for additional defense spending required to maintain troop levels in Afghanistan, money to help with the Louisiana flooding, and funding to address the Zika virus.

The Senate has not announced a detailed schedule for September, but we expect to see possible action during the first week on the Zika supplemental package and a move to pass the Defense Appropriations bill. Both bills were blocked in July when Democrats filibustered the measures.

West Coast Advisors
Strategic Public Affairs

August 31, 2016

To: Inland Empire Utilities Agency

From: Michael Boccadoro
President

RE: August Legislative Report

Overview:
The 2015-2016 Legislative Session is officially over. The final flurry of bills were passed and are onto the Governor's desk. The end of the session was full of the usual last minute amendments and "gut and amends" as members tried to sneak in items pretty much under the cover of darkness. Extension of the state's greenhouse gas reduction targets and other climate change measures were some of the hottest issues in the final weeks, days and hours of the session. Ultimately, the Legislature passed SB 32 (Pavley) to extend the state's greenhouse gas reduction targets to 40 percent below 1990 levels by 2030. The Governor has until the end of October to sign legislation and barring the call of a special session, the Legislature will not reconvene until December, when a new crop of members will be seated. Democrats are expected to pick up a number of seats that could significantly change the direction of the Legislature as moderate Democrats decline in power.

Expansion of the California Independent System Operator (CAISO), did not make it to the legislative finish line. There was an attempt in early August to craft a measure that would authorize California to enter into an expanded western regional grid that was ultimately tabled until next year. The Governor's office and proponents of the concept realized there were too many concerns and not enough time to craft a measure that could garner wide support.

Amid criticism from environmental groups, such as the Natural Resources Defense Council (NRDC), the State Water Resources Control Board (SWRCB) is defending their new program allowing local water agencies to self-certify their water supply needs in in the coming years and weakening or removing customer conservation requirements.

SB 970 (Leyva), IEUA's sponsored bill to promote the use of existing digester capacity at wastewater treatment plants for food waste diversion is on the Governor's desk awaiting signature.

The water supply picture in California remains the same with Northern California reservoirs declining, but not yet reaching critically low levels. In a repeat from last year, regulators are holding water behind Shasta Dam and releasing more water from Folsom and Oroville Reservoirs in order to release cold water from Shasta later in the year for salmon spawning. Southern California reservoirs remain critically low, the result of surplus winter and spring flows not moving to south of Delta reservoirs. Environmental requirements resulted in the loss of nearly one million acre-feet of water supply.

The Little Hoover Commission met on August 25 to hear testimony from a number of stakeholders regarding special districts. While their primary focus was on fire and hospital districts, water district stakeholders were on guard because of past Little Hoover Commission Reports that criticized special district reserves and property tax allocations.

The Joint Legislative Audit Committee met to consider audit requests in mid-August. Senator Lois Wolk (D-Davis) and Assemblymember Susan Eggman (D- Stockton) requested an audit of the California WaterFix. The audit request was very similar to Public Records Act requests to Metropolitan Water District of Southern California, and other State Water Contractors made by "Restore the Delta." The Department of Water Resources testified that they are very willing to comply with the audit. Several Southern California members questioned if the audit was a ploy to discredit the WaterFix. Wolk and Eggman, both staunch opponents of conveyance, assured them it was not. Ultimately, the audit request was granted.

An ongoing battle over predation of endangered native salmon, smelt and steelhead by non-native striped and black bass is back. A coalition of water, farming and business groups have been successful in getting the Fish and Game Commission to commit to holding an extended hearing to consider the benefits of predation controls.

Inland Empire Utilities Agency Status Report – August 2016

CAISO Expansion

The movement to authorize the expansion of the California Independent System Operation (CAISO) has been delayed until next year. As reported last month, CAISO has been in talks with other western states to create a broad western governance structure for the operation of the electric grid.

After significant review, many stakeholders were concerned at the pace at which this very important policy decision was being discussed. Beyond stakeholder concern, legislative staff and policy leaders also voiced concern about the rush to judgment and the potential policy implications for California's clean energy and climate change programs.

There are still significant concerns that need to be addressed, including if the claim that regionalization will create broad benefits within the state will actually matriculate.

Parties such as labor unions, ratepayer advocates and some environmental groups are concerned that the proposal will lead to increased imported renewable power from places such as Wyoming, not create in-state renewable energy projects that will bring jobs and revenue to California. Other parties such as the State Water Contractors Association remain concerned about significantly increased costs and limited or no real benefits.

Many parties procure adequate renewable energy already and do not need to rely on imported renewable energy, and are therefore concerned about the portion of regionalization costs they would be responsible for as participants in of the regional grid.

Ultimately, the move to secure legislative authorization to expand the CAISO was tabled until next year. Legislative leaders have asked stakeholders to craft language and submit to the Assembly Utilities and Commerce Committee. A working draft will be compiled and discussions will continue through the fall and winter to try to address the remaining issues.

"Self-Certification" Update

Amid criticism from environmental groups, such as the Natural Resources Defense Council (NRDC), the State Water Resources Control Board (SWRCB) is defending their new program allowing local water agencies to self-certify their water supply needs in in the coming years and weakening or removing statewide customer conservation requirements.

Of the 411 water suppliers required to submit data, only 32 indicated that they intend to retain the conservation standards set by the SWRCB.

SWRCB Chair Felicia Marcus noted that while it is unfortunate that some water agencies have recently "telegraphed the wrong message," California is still in a drought, but improved water supplies this year justify relaxing the conservation standards. Marcus also noticed that winter hydrology will be key in reevaluating whether mandatory conservation standards should be implemented again in 2017.

NRDC has strongly criticized the SWRCB's move away from mandatory conservation. In a recent press release, they criticized the 'stress test" results, highlighting the 379 agencies that self-certified their water supplies.

Specifically, NRCD called out Metropolitan Water District of Southern California (MWD) for having "overly optimistic and unprecedented supply projections without sufficient documentation to get the supplies it was reporting." They also noted that some of the supplies MWD is claiming are also claimed by Coachella Valley Water District and Desert Water Agency. They claim that the SWRCB is allowing water suppliers to double-dip, which will lead to further water supply shortages.

MWD has vigorously rebuffed those allegations saying that NRDC is interpreting the data incorrectly. There is a rumor that NRDC will pursue legislation next year to reinstate mandatory conservation.

Reservoir Levels Update

The water supply picture in California remains the same with most Northern California reservoirs declining, but not reaching critically low levels. The exceptions are Folsom and San Luis which are well below normal levels. San Louis was at an all-time low in early August before making some minor gains in recent weeks. In a repeat from last year, regulators are holding water behind Shasta Dam and releasing more water from Folsom and Oroville Reservoirs in order to release cold water from Shasta later in the year for salmon spawning. Southern California reservoirs remain critically low, the result low Southern California precipitation this past winter and limited surface water supplies moving through the Delta.

Reservoir	Percent of Capacity		Percent of Historical Average	
	Jun. 30	Aug. 26	Jun. 30	Aug. 26
Lake Shasta	86%	71%	107%	109%
Lake Oroville	84%	54%	103%	81%
Folsom Lake	74%	36%	89%	57%
San Luis Reservoir	18%	13%	29%	31%
Lake Perris	37%	37%	46%	48%
Castaic Lake	75%	76%	86%	93%

SB 970 (Leyva) Update

IEUA's sponsored legislation, SB 970 (Leyva) not only passed both houses with an overwhelming majority and is on the Governor's desk awaiting signature, but the language from the bill is also included in SB 859, the Budget Committee's Resources Trailer Bill. While it is very unlikely the Governor will veto SB 970, even if he does, the same language is in SB 859, which is backed by the administration.

The next step is to work with CalRecycle as they allocate the Greenhouse Gas Reduction Funds allocated to organic waste diversion (see below).

Little Hoover Commission Hearing on Special Districts

The Little Hoover Commission (LHC) met on August 25 to hear testimony from a number of stakeholders regarding special districts. While their primary focus was on fire and hospital districts, water district stakeholders were on guard because of past Little Hoover Commission Reports that have been critical of special district reserves and property tax allocations.

Just three of the 13 members of the LHC were present (the four members of the Legislature on the Commission were in session):

- Pedro Nava, Chair: Nava represented the Santa Barbara area in the State Assembly from 2004-2010 and has been the Chair of the Little Hoover Commission Since 2014.
- Helen Torres: Appointed to the LHC in 2016. She is the Executive Director of a women's leadership and advocacy organization.
- Sean Varner: Appointed to the LHC in 2016. He is a real estate attorney from San Bernardino.

Testimony was requested by the LHC from the California Special Districts Association (CSDA), the Local Agency Formation Commission (LAFCO), representatives from both hospital and fire districts, Howard Jarvis taxpayers Association, and a representative from CaliforniaCityFinance.com. This report will omit highlights from the hospital and fire representatives, as their testimony was not relevant to water agency issues.

<u>Kyle Packham, California Special Districts Association:</u>

Packham did a thorough job of giving an overview of what services special districts provide, how they operate and what steps they have taken since the last 2010 Little Hoover Commission report on special districts. He talked about increased transparency, noted that CSDA, while neutral on

consolidation, supports a LAFCO process that is open, transparent and provides local stakeholders a lead role in the process.

On the subject of property taxes, Packham highlighted that voters approved the creation of specific special districts as well as their property tax increments and voters want their taxes to stay local. Testifying parties shared written testimony prior to the hearing. As a result, Packham spent his time addressing issues raised in the written testimony of Michael Coleman of CaliforniaCityFinance.com (originally listed to be testifying on behalf of the CA League of Cities. The League sent a letter, and Coleman also stated, that he was only representing his own views and the views of CaliforniaCityFinance.com, not the League's) and Jon Coupal of The Howard Jarvis Tax Payers Association.

In response to Michael Coleman's written testimony that special district property taxes should be returned to cities and/or counties Packham noted:

- Past experience notes that there were problems the last time when special district funds were transferred to counties.
- The irony of cities and counties taking special district funds when they get outraged when the state takes their funds.
- That special district boundaries often cross political boarders, potentially resulting in different levels of funding for critical areas.
- Local voters approved the tax for specific functions of a local agency, not to a city or county for other purposes.

In response to Howard Jarvis Taxpayers Association's, written testimony highlighting districts that have significant reserves Packham noted:

- The calculations are fundamentally flawed. Funds were lumped many different categories and does not necessarily mean unallocated cash in the bank.
- 76% of the reserves Howard Jarvis says are "hoarded" are not cash reserves, but are funds in reserve for pending infrastructure upgrades.
- The Little Hoover Commission should be focusing on why special districts are able to manage property taxes and reserves so prudently.

After public testimony, the time for reactions from the Commissioners came and went without any indication about the direction the Commission might take in the future regarding special districts. Both ACWA and CSDA are convening workgroups to debrief the hearing and discuss next steps. Conversations with LHC staff seem necessary to determine what direction the Commission is pushing for the report to follow. Once the focus is known, a more specific strategy can be formed. It is still unclear what the focus of the LHC recommendations are. The next LHC meeting is Oct. 27.

Joint Legislative Audit Committee Approves Request to Audit WaterFix

The Joint Legislative Audit committee voted earlier in August to approve Senator Lois Wolk's (D-Davis) and Assemblywoman Susan Talamantes Eggman's (D-Stockton) request to audit the California WaterFix project. The two anti-WaterFix members argued that there is no oversight over how state agencies have spent $248 million in taxpayer's money during design and planning.

Members of the committee expressed concern that this audit request was just an attempt to derail the project. Wolk and Eggman assured that it was merely in the interest of public transparency and the Howard Jarvis Taxpayers' Association testified in support of that goal. Several Southern California members questioned if the audit was a ploy to discredit the WaterFix. Wolk and Eggman, both staunch opponents of conveyance, assured them it was not. After the Department of Water Resources testified that the audit would not hold up the development and review of the project and did not raise any objections to complying with the effort, the committee approved the audit request.

Delta Predation Petition

A broad statewide group of supporters recently submitted a petition to the California Fish and Game Commission. The petitioners include Metropolitan Water District of Southern California, San Luis Delta Mendota Water Authority, San Joaquin Tributaries Authority, California Chamber of Commerce, State Water Contractors, Southern California Water Committee, Western Growers Association, Northern California Water Association, California Farm Bureau Federation, and Kern County Water Agency.

The petition sought to increase the bag limits and decrease the size limits for black bass and striped bass in the Sacramento-San Joaquin Delta and rivers tributary to the Delta. Specifically, the petition called for decreased size limit for black bass from 12 inches to 8 inches and increased daily bag limit from 5 fish to 10 fish; and increased bag limit for striped bass from 2 fish to 6 fish and decreased size limit from 18 inches to 12 inches.

Unfortunately, days before the petition was scheduled to be heard before the Commission, staff released a recommendation to the Commissioners to deny the petition. In addition, staff had only allocated the petitioners 10 minutes to present the petition and address the overwhelming amount of misleading public comment that was submitted before the hearing. Despite the petitioners' best efforts to have a fair and thoughtful discussion with Commission staff prior to the hearing, staff was not as open minded as the petitioners had hoped. As a result, the petitioners felt it best to withdraw the petition with the Commission.

In addition to delivering a letter from more than 20 legislators expressing their concern with the issue and their interest in finding a solution as soon as possible, supporters of the petition still attended the hearing to explain the petitioners' frustration with the Commission's process and procedures along with a firm commitment to continue to address the issue of predation. The Commissioners were receptive and committed to scheduling an in-depth informational workshop for interested parties to present their points of view in an attempt to robust discussion about how best to address the issue. A hearing before the Commission's Wildlife Resources Committee is expected in the coming months.

Climate Change Legislation

SB 32 (Pavley): SB 32 (Pavley) is sitting on the Governor's desk awaiting signature. The measure establishes the goal of reducing greenhouse gasses (GHGs) at least 40 percent below 1990 levels by 2030. The bill, along with its companion measure, AB 197 (E. Garcia) passed each legislative house with relative ease. SB 32 was diluted from its original version, to only include the 2030 goal with no mention of the cap and trade program.

AB 197 adds a number of transparency and accountability measures to provide greater scrutiny and oversight of California Air Resources Board (CARB) including adding two non-voting legislative members to the board, and creating a Joint Legislative Oversight Committee.

Passage of SB 32 is certainly an important step in advancing California's climate change goals, there is still significant uncertainty in the market mechanism CARB is using to achieve GHG reductions. The legality of the cap-and-trade program is still under review by the state appellate court. If the state loses the case, a two-thirds vote of the legislature would be needed to re-authorize the program as a tax, or the state would need to find other ways to reduce GHGs.

The last two auctions of GHG allowances have been dismal, only selling a fraction of the allowances expected and raising a total of just over $19 million of the $1.2 billion expected. It is very clear that those needing allowances and carbon marketers are only purchasing what they need for the current compliance period, not buying future allowances, amidst speculation that the program could be invalidated.

This is a major blow to the Greenhouse Gas Reduction Fund (GGRF). Allowance sales were predicted to add several billion dollars annually to the GGRF for the Governor and the Legislature to expend on projects that would help reduce GHGs. The GGRF currently has $1.4 billion dollars available that was not appropriated with the 2015-16 budget and was not appropriated when the 2016-17 budget passed in June. At the end of session the Legislature appropriated about $900 million, leaving $462 million in the fund. Specifically, CalRecycle received $40 million for organic diversion.

SB 1383 (Lara) regarding short-lived climate pollutants (SLCPs) is another significant component of the state's climate change agenda. The bill would authorize CARB to implement their SLCP strategy to reduce methane and hydrofluorocarbon by 40 percent and anthropogenic black carbon by 50 percent below 2013 levels by 2030.

SB 1383 turned out to be one of the most contentious bills at the end of session. Senator Lara came to an agreement with both the solid waste and dairy industries, and both groups of stakeholders removed their opposition. For the solid waste sector, the final bill:

- Establishes a target of 50 percent reduction in the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction goal by 2025 and requires CalRecycle and CARB to adopt regulations to achieve the organic waste reduction targets.
- The bill prohibits CalRecycle and CARB from establishing numeric organic waste disposal limits for individual landfills.
- Authorizes CalRecycle and CARB to:
    - Require local jurisdictions to impose requirements on generators, and penalties for noncompliance.
    - Include different levels of requirements for local jurisdictions and phased timelines for meeting 2020 and 2050 goals.

Legislative Update

The legislature officially gaveled closed on August 31. Below is the recap of results after the final frenzy.

SB 1298 (Hertzberg): The California Water Foundation has been working with Senator Hertzberg on a Proposition 218 fix to allow water agencies to adopt lifeline rates and adopt conservation-based rates without amending the California Constitution. The author took amendments that removed all the lifeline and conservation based rates provisions from the bill, so the bill only addresses stormwater.

Most of the opposition ultimately dropped off, but many remain concerned that the bill is unconstitutional. Concern also is aimed at the term "indispensable" water use, which the measure utilizes to try to work around the Constitutional issues.

The bill was not taken up on the Assembly Floor and is dead for the year.

AB 2909 (Levine): Assemblyman Marc Levine recently gutted a bill in the Senate and inserted language similar to his AB 2304, which did not make it out of Assembly appropriations committee earlier this year. His new bill was a paired down version of AB 2304 and only addresses reoccurring transfers and transfers that are environmentally beneficial. The bill requires the Department of Water Resources (DWR) to develop a 30-day review process for reoccurring transfers, exchange of water rights, point of diversion changes, and place of use changes if the transfer is reoccurring or for an environmentally beneficially use. Additionally, the bill would require DWR to set up a 30-day review process for reoccurring water transfers between contractors for State Water Project water and for reoccurring transfers that utilize the State Water Project facilities.

The bill did not pass out of the Senate Appropriations Committee.

SB 552 (Wolk): Would authorize the State Water Resources Control Board to order consolidation where a public water system or a state small water system is serving, rather than within, a disadvantaged community, and would limit the authority of the state board to order consolidation or extension of service to provide that authority only with regard to a disadvantaged community. This bill would define disadvantaged community for these purposes, to mean if the community is in a mobile home park even if it is not in an unincorporated area or served by a mutual water company. This bill contains other related provisions and other existing laws.

The bill was passed and is awaiting signature by the Governor.

SB 554 (Wolk): The measure extends a delta levee maintenance program which allows a local agency to request reimbursement for costs incurred in connection with the maintenance or improvement of project or nonproject levees in the Sacramento-San Joaquin Delta.

There is still opposition to the bill. MWD has asked the author to request an audit of the program, for the sake of transparency. The author has refused to do so.

The bill was passed and is awaiting signature by the Governor. The Governor has until September 30th to act.

Below are bills IEUA is tracking.

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August 31, 2016

Legislative Report

TO: **Joe Grindstaff**
General Manager, Inland Empire Utility Agency

FR: **David M. Weiman**
Agricultural Resources
LEGISLATIVE REPRESENTATIVE, IEUA

SU: **Legislative Report, August 2016**

Congress was out of session all of August. The House and Senate return to Washington on September 6 – and resume work with 24 calendar days remaining in the fiscal year, none of the annual funding bills enacted and, as Washington is accustomed to expect, renewed threats of a government shut down.

No legislative business was conducted by the House or Senate during August.

And overwhelming everything, the pending national election.

According to media accounts, new polls published almost daily and endless pundit speculation, not only is the presidency at stake, but control of the Senate and House are both "in play" as are several Governorships.

And, without a doubt, this is an election cycle that defies prediction, traditional political logic or insider's knowledge. Outcomes are unknown.

This election cycle brings something new: threat of e-interference (hacking) by Russians, Chinese, Iranian or others. That, combined with open discussion of an October surprise (of unknown elements) make this one of the least certain and most volatile elections in decades.

WaterSense Authorization – Water Softener Language. During August, a ever-enlarging group of local and national water agencies held a series of conference call meetings to (a) establish a legislative strategy to deal with the pending authorization of EPA's WaterSense program in two different bills (WRDA and the Energy Bill); (b) modify objectives (request statutory language, not just report language); and (c) work with conferees on a bi-partisan basis to secure inclusion of statutory language in both/either bill.

IEUA is working with CASA, LA Sanitation, ACWA, NACWA and WateReuse.

As previously reported, this authorization was not the subject of hearings, or any kind of public review by the Senate before general language authorizing the EPA's WaterSense program was included in the Senate version of WRDA. When these groups learned of it, they collectively went to Senator Boxer and sought statutory language clarifying WaterSense priorities.

Given IEUA, LA Sanitation and ACWA's experience with WaterSense in 2011 (IEUA played a lead role blocking the WaterSense effort to review water softeners without regard to salt sensitive regions) . At the time, and given the rush to finalize the WRDA bill, Boxer and her staff recommended report language, not statutory or bill language. Collectively, the groups involved drafted, recommended "report" language which was accepted on a bi-partisan basis and included in the Senate version of the bill (no companion language in the House version of the WRDA bill..

The Report language is strong and clear, but statutory language, if included, would provide greater clarity and more certainty. So, these same groups decided to ask conferees to include "statutory" language. Language was prepared, approved by each of the groups referenced above, and during August was circulated to the House-Senate conferees. When the House and Senate reconvene, IEUA will participate in outreach of those members.

Rep. Latta (R-OH) and Rep. Jerry McNerney (R-CA) are leading a bi-partisan effort to secure statutory language. Latta is a conferee, but McNerney is not. McNerney, however, has offered to communicate his concerns to the House Democratic conferees, including Rep. Lois Capps, a California House Conferee from Southern California (Santa Barbara).

A larger question looms: will the House and Senate be able to conclude work on either WRDA or the Energy bill. As the recess ends and the Congress is about to reconvene, nothing is certain (more on this below). Drew Tatum, Martha Davis and I have been directly involved with all of these developments.

Drought Bills. Throughout August, periodic reports surfaced indicating that House Majority Leader, Rep. Kevin McCarthy (R-Bakersfield) was "in talks" with Senator Dianne Feinstein over the highly controversial drought (Valadao) bill. But, if there was progress, nothing was publicly acknowledged or reported.

Conclusion of the Fiscal Year, Pending New Fiscal Year – and Funding (Annual Appropriations). Much is known and little is certain. None of the twelve annual funding (appropriations) bills have been enacted. When Congress returns on the 6th, they will have 24 calendar days to complete action on "something." Typically, in such situations, Congress passes a short-term funding bill – or – a CR (Continuing Resolution) for anywhere from a few days to a few weeks. Other options are to enact individual spending bills or enact some kind of Omnibus spending bill, frequently pre-agreed to with the Administration.

What will occur – and how it will happen – is not known at this time. Why? Speaker Ryan has a deeply divided House R Caucus. His ability to lead is severely limited by divisions within his own ranks.

Shortly before the recess began, back in July, the Freedom Caucus began circulating the idea that a CR should be advanced that will extend past the first of the year and into the new Congress (180 days). House R Appropriators do not agree, but the Freedom Caucus has "signaled" that they will not vote to support any other option. Their motivation is political. They want to remove President Obama from further involvement in funding or policy issues. That leaves Speaker Ryan potentially paralyzed OR asking Minority Leader Pelosi to round up sufficient votes to pass a short-term CR. If Ryan forms an alliance with Pelosi (which is what Boehner did on a number of critical bills), the political consequences are potentially severe. What can – or will – pass the House, is just not known.

Senate Minority Leader, Sen. Harry Reid (D-NV) has publicly stated that the 180-day CR is a non-starter and the Administration has said the same.

As Congress sets to return, no one is blinking – and that has given rise to speculation that this could cause or lead to another government shut-down. Media speculation is already underway even thought while few believe it will actually occur, the possibility remains.

Underlying everything – election issues: whether or not the House will remain in R control or will shift to D control, and if Rs retain control, whether or not Ryan will be reelected by his Caucus to serve as Speaker in the next Congress. Another scenario – Ryan will NOT want to serve as Speaker if Trump loses and Ryan decides to run for President in 2020. And still another factor – if the House Rs lose seats, but retain control of the House, the Freedom Caucus will likely become disproportionately more powerful and actually gain influence in the new Congress inside the House R Caucus. If the House Rs lose 30 seats (unlikely but still subject to daily speculation), then the Ds would control the House and Minority Leader Pelosi would almost assuredly be elected Speaker. New scenarios emerge almost on a daily basis.

Appropriations, Lame Duck, and Pending Legislation. In addition to the stand-off on annual funding bills, some of the Freedom Caucus members have publicly stated that there should be NO Lame Duck (post-election) session.

As noted, after Congress reconvenes, there will be 24 calendar days – and approximately 14-16

legislative days to sort out all of the above. It is widely assumed that many of the major bills – Energy, WRDA, individual appropriations, emergency Zika funding, drought, cyber-security and others – may not be finalized until the Lame Duck.

If there's no Lame Duck, then the session will end "sine die" (final adjournment) and all of these bills would die as well. In the next Congress, they would have to be reintroduced and considered, even if fast-tracked.

As you might imagine, the leadership, authorizers and appropriators have every interest to complete action on their bills – and a very real legislative/political confrontation will be unfolding beginning the moment Congress returns.

In effect, there are three separate, and distinctly different, legislative battles underway – each at the same time. First, House Rs are fighting between and among themselves over priorities, programs, policy and politics. Second, Republicans and Democrats will be fighting over the same issues, but with an emphasis on different funding and policy priorities. Third, institutionally, the House and Senate will be engaged in their own tug-of-war. Once all that's sorted out, then the President and his Administration get to weigh in. Vetos have already been threatened.

If the Freedom Caucus ties Speaker Ryan's hands (as they did to Speaker Boehner) – that stand-off (at the extreme) could result in a government shut-down. Again, open speculation is already underway.

A Lame Duck session – like everything else – unclear and unknown at this time.

Almost everyone here in Washington anticipates that little will be decided before the last week of the month if not the night of September 30th.

Fate of other major bills (cited above). Also unclear and unknown.

In my July report, I stated that *"Congress became more and more mired in internal caucus conflicts."* It remains an accurate assessment.

INFORMATION ITEM 2C

CALIFORNIA STRATEGIES, LLC

Date: August 31, 2016

To: Inland Empire Utilities Agency

From: John Withers, Jim Brulte

Re: August Activity Report

Listed below is the California Strategies, LLC monthly activity report. Please feel free to call us if you have any questions or would like to receive any more information on any of the items mentioned below.

- Met with Executive Management Team to review priority issues and to discuss activities for August that Executive Staff wanted accomplished
- Discussed Ontario Plume/Title XVI Funding
- Reviewed Chino Basin Water Bank project concept
- Support and advise on IEUA/SBVMWD transfer transaction on an as needed basis.
- Reviewed Water Rates progress with member agencies and Regional Contract renewal.
- Continue to monitor statewide water issues including The Water Fix, water bond, and drought relief act activities. Made recommendation regarding the request for money from various state special funds.
- Monitor Santa Ana Regional Board agenda and issues of interest to IEUA including the Ontario Plume agreement
- Respond to requests for information from IEUA Directors.

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Public, Legislative Affairs, and Water Resources Committee

INFORMATION ITEM 2D

State Legislation Matrix

Bill Number	Sponsor	Title and/or Summary	Summary/Status	IEUA Position
AB 1704	Dodd	Water Rights	The Water Rights Permitting Reform Act of 1988 provides that the State Water Resources Control Board is not required to adopt general conditions for small irrigation use until the board determines that funds are available for that purpose and that a registration for small irrigation use pursuant to the act is not authorized until the board establishes general conditions for small irrigation use to protect instream beneficial uses, as specified. This bill would require the board, on or before January 1, 2018, to adopt general conditions that would permit a registrant to construct a facility that would store water for small irrigation use during times of high streamflow in exchange for the registrant reducing diversions during periods of low streamflow, as specified.	6/20 Gut and Amend Failed Assembly Appropriations Committee
AB 1713	Eggman	Sacramento-San Joaquin Delta: peripheral canal	Current law requires various state agencies to administer programs relating to water supply, water quality, and flood management in the Sacramento-San Joaquin Delta. The bill would prohibit the construction of a peripheral canal, as defined, unless expressly authorized by an initiative voted on by the voters of California on or after January 1, 2017, and would require the Legislative Analyst's Office to complete a prescribed economic feasibility analysis prior to a vote authorizing the construction of a peripheral canal.	OPPOSE DEAD Failed Assembly Appropriations Committee
AB 1738	McCarty	Building Standards: Dark Graywater	Would define "dark graywater" as a specified wastewater that comes from kitchen sinks and dishwashers. This bill would require the Department of Housing and Community Development, at the next triennial building standards rulemaking cycle, to adopt and submit for approval building standards for the construction, installation, and alteration of dark graywater systems for indoor and outdoor uses. This bill contains other existing laws.	DEAD Senate Environmental Quality Committee
AB 1749	Mathis	California Environmental Quality Act: exemption: City of Porterville	Would, until January 1, 2021, exempt from the California Environmental Quality Act's requirements a water treatment project determined by the City of Porterville as the best option based on a certain feasibility study, as provided. This bill contains other related provisions.	6/15 Gut and Amend DEAD Senate Environmental Quality Committee

AB 1755	Dodd	The Open and Transparent Water Data Act	Would enact the Open and Transparent Water Data Act. The act would require the Department of Water Resources to establish a public benefit corporation that would create and manage (1) a statewide water information system to improve the ability of the state to meet the growing demand for water supply reliability and healthy ecosystems, that, among things, would integrate existing water data information from multiple databases and (2) an online water transfer information clearinghouse for water transfer information that would include a database of historic water transfers and transfers pending responsible agency approval and a public forum to exchange information on water market issues.	SUPPORT Governor's Desk
AB 1842	Levine	Water Pollution: Fines	Current law imposes a maximum civil penalty of $25,000 on a person who discharges various pollutants or other designated materials into the waters of the state. This bill would impose an additional civil penalty of not more than $10 for each gallon or pound of polluting material discharged. The bill would require that the civil penalty be reduced for every gallon or pound of the illegally discharged material that is recovered and properly disposed of by the responsible party.	Governor's Desk
AB 1925	Chang	Desalination: Statewide Goal	The Cobey-Porter Saline Water Conversion Law, states the policy of this state that desalination projects developed by or for public water entities be given the same opportunities for state assistance and funding as other water supply and reliability projects, and that desalination be consistent with all applicable environmental protection policies in the state. This bill would establish a goal to desalinate 300,000 acre-feet of drinking water per year by the year 2025 and 500,000 acre-feet of drinking water per year by the year 2030.	DEAD
AB 2206	Williams	Renewable Gas	Would require the State Air Resources Board , in coordination with the Public Utilities Commission and State Energy Resources and Conservation Development Commission, to consider and, as appropriate, adopt a policy or programs to increase the production and use of renewable gas, as specified, generated by either an eligible renewable energy resource that meets the requirements of the California Renewables Portfolio Standard Program or direct solar energy, as specified.	6/25 Gut and Amend DEAD Senate Environmental Quality Committee

AB 2304	Levine	California Market Water Exchange	Would establish the California Water Market Exchange, governed by a 5-member board, in the Natural Resources Agency. This bill would require the market exchange, on or before December 31, 2017, to create a centralized water market platform on its Internet Web site that provides ready access to information about water available for transfer or exchange.	DEAD Failed Passage Assembly Appropriations Committee
AB 2313	Williams	Renewable Natural Gas	The California Global Warming Solutions Act of 2006 establishes the State Air Resources Board as the state agency responsible for monitoring and regulating sources emitting greenhouse gases. This bill would require the state board to study and evaluate a strategy or strategies to increase the instate production and use of renewable natural gas, as defined, to further specified goals.	Governor's Desk
AB 2488	Dababneh	Protected species: unarmored threespine stickleback: taking or possession.	Would permit the Department of Fish and Wildlife to authorize, under the California Endangered Species Act, the take of the unarmored threespine stickleback (Gasterosteus aculeatus williamsoni) attributable to the periodic dewatering, inspection, maintenance, or repair of the Metropolitan Water District of Southern California's Foothill Feeder water supply facility from Castaic Dam to the Joseph Jensen Treatment Plant in the County of Los Angeles, as specified, if certain conditions are satisfied.	SUPPORT Governor's Desk
AB 2583	Frazier	Sacramento-San Joaquin Delta Reform Act of 2009	Would add a definition of the California Water Fix to the Sacramento-San Joaquin Delta Reform Act of 2009. This bill would eliminate certain provisions applicable to the BDCP and would revise other provisions to instead refer to a new Delta water conveyance project for the purpose of exporting water. This bill would require new Delta water conveyance infrastructure to be considered as interdependent parts of a system and to be operated in a way that maximizes benefits for each of the coequal goals. This bill contains other related provisions and other existing laws.	OPPOSE DEAD- Did not pass Water, Parks and Wildlife Committee
AB 2702	Atkins	Climate Change	Would state the intent of the Legislature to enact legislation that would continue the work with local governments, state agencies, and others to meet the goals set forth in Governor Brown's Under 2 MOU, which brings together subnational governments willing to commit to either reducing the emissions of greenhouse gases 80% to 95% below 1990 levels by 2050 or achieving a per capita annual emissions target of less than 2 metric tons of carbon dioxide equivalent by 2050.	DEAD Failed Assembly Appropriations Suspense

ACA-8	Bloom	Local government financing: water facilities and infrastructure: voter approval	Would create an additional exception to the 1% limit for a rate imposed by a city, county, city and county, or special district to service bonded indebtedness incurred to fund the construction, reconstruction, rehabilitation, or replacement of wastewater treatment facilities and related infrastructure, potable water producing facilities and related infrastructure, nonpotable water producing facilities and related infrastructure, and stormwater treatment facilities and related infrastructure, that is approved by 55% of the voters of the city, county, city and county, or special district, as applicable, if the proposition meets specified requirements, and would authorize a city, county, city and county, or special district to levy a 55% vote ad valorem tax. This bill contains other related provisions and other existing laws.	Assembly Rules Committee
SB 163	Hertzberg	Wastewater treatment: recycled water	Would declare that the discharge of treated wastewater from ocean outfalls, except in compliance with the bill's provisions, is a waste and unreasonable use of water in light of the cost- effective opportunities to recycle this water for further beneficial use. This bill, on or before January 1, 2026, would require a wastewater treatment facility discharging through an ocean outfall to achieve at least 50% reuse of the facility's actual annual flow, as defined, for beneficial purposes.	Oppose Unless Amended DEAD Withdrawn from committee
SB 885	Wolk	Construction Contracts: Indemnity	Would specify, with certain exceptions, for construction contracts entered into on or after January 1, 2017, that a design professional, as defined, only has the duty to defend himself or herself from claims or lawsuits that arise out of, or pertain or relate to, negligence, recklessness, or willful misconduct of the design professional. Under the bill, a design professional would not have a duty to defend claims or lawsuits against any other person or entity arising from a construction project, except that person's or entity's reasonable defense costs arising out of the design professional's degree of fault, as specified.	OPPOSE DEAD Withdrawn from committee
SB 1043	Allen	Renewable gas: biogas and biomethane	Would require the State Air Resources Board to consider and adopt policies to significantly increase the sustainable production and use of renewable gas, as defined, and, in so doing, would require the state board, among other things, to ensure the production and use of renewable gas provides direct environmental benefits and identify barriers to the	DEAD Failed Senate Appropriations Suspense

			rapid development and use of renewable gas and potential sources of funding.	
SB 1318	Wolk	Local government: drinking water infrastructure or services: wastewater infrastructure or services	Would prohibit a local agency formation commission from authorizing a city or a district to extend drinking water infrastructure or services or wastewater infrastructure or services until it has extended those services to all disadvantaged communities within or adjacent to its sphere of influence, as specified, or has entered into an agreement to extend those services to those disadvantaged communities, unless specified conditions are met. This bill contains other related provisions and other existing laws.	DEAD Dropped by author

Public, Legislative Affairs, and Water Resources Committee

INFORMATION ITEM 2E

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Date:	September 21, 2016
To:	The Honorable Board of Directors
Through:	Public, Legislative Affairs, and Water Resources Committee (*09/14/16*)
From:	P. Joseph Grindstaff General Manager
Submitted by:	Kathy Besser Manager of External Affairs
Subject:	Water Softener Rebate Program Status Report

RECOMMENDATION

This is an informational item for the Board of Directors to receive and file.

BACKGROUND

In 2008, the Inland Empire Utilities Agency (IEUA/Agency) developed a program, approved by the Regional Technical and Policy Committees, to offer a rebate program for the voluntary removal of self-regenerating water softeners. Implemented in partnership with the Metropolitan Water District of Southern California, National Water Research Institute, the Southern California Salinity Coalition, and the contracting agencies, IEUA developed fact sheets, billing inserts (for inclusion in residential monthly bills), newspaper and cable TV ads, and even a video that could be shown on local cable stations explaining to the public the impact of salt discharged from the use of residential self-regenerating water softeners on the regional recycled water supply.

In 2009, Governor Schwarzenegger signed the IEUA-sponsored AB 1366 (2009, Feuer) which provided local governments with expanded authority to regulate residential self-regenerating water softeners, especially in areas of the state with identified salt problems (e.g., water bodies that are adversely impacted by salinity and high-use groundwater basins that are hydro-geologically vulnerable to salinity pollution). The bill applies only to cities and local and regional agencies that own and operate a community sewer or water recycling facility.

The first step in the process of implementing the new law was for the Santa Ana Regional Water Quality Control Board (Regional Board) to adopt a finding as part of a formal order that the "control of residential salinity input will contribute to the achievement of water quality objectives." Although IEUA's Regional Water Recycling Permit conditions included the requirement that IEUA and the contracting agencies regulate residential self-regenerating water softeners to the extent allowed by law, the language did not include the specific finding required by AB 1366.

In March 2010, the Regional Board adopted Order R8-2010-0008, which amended IEUA's Regional Water Recycling Permit, Order R8-2009-0021, and made the necessary finding that control of the discharge of waste from residential self-regenerating water softeners into the collection systems will contribute to the achievement of the water quality objectives approved in the Basin Plan Amendment.

In January 2011, IEUA and the contracting agencies formed a Water Softener Task Force with the goal of developing ordinance language to prohibit the future installation of self-regenerating water softeners in homes. The language would not prohibit existing softeners or exchange tank services for water softeners. The Task Force further recommended that the Agency adopt the regional ordinance amendment first, and that the contracting agencies follow, adopting their individual ordinances at their earliest convenience. This recommendation was unanimously approved by both the Technical and Policy Committees in February 2011.

Consistent with AB 1366, the Agency properly noticed and held a public hearing on June 15, 2011 to amend the Agency's Ordinance No. 87, to prohibit the future installation of residential self-regenerating water softeners. The Agency received unanimous public support for the ordinance. To date, the water softener prohibition ordinance revisions have been adopted by the following member agencies:

- City of Montclair in December 2011
- City of Upland in January 2012
- City of Fontana in April 2012
- Cucamonga Valley Water District in July 2014

Staff Plan: (External Affairs Department assumed work April 2015)

- IEUA staff will respond to public inquiries via e-mail and phone
- Continue bi-annual store audits with follow-up letters where needed (last audit Jan 2016, next Aug 2016)
- Work with member agencies to include bill inserts bi-annually
- Advertise in local newspapers (English and Spanish) twice per year
- Utilize social media

Public Outreach

- FY 2015/2016
    - Advertised media –
        - Foothill Reader/LA Times – AWS - Sunday, June 12th
        - Foothill Reader/LA Times - No Drugs Down The Drain - Sunday, June 19th
        - Daily Bulletin - AWS - Sunday, June 5th
        - Daily Bulletin - No Drugs Down The Drain - Sunday, June 19th
        - La Opinion - No Drugs Down The Drain - Monday, June 13th
        - La Opinion – AWS - Monday, June 20th
        - Fontana Herald – AWS - June/November 2015

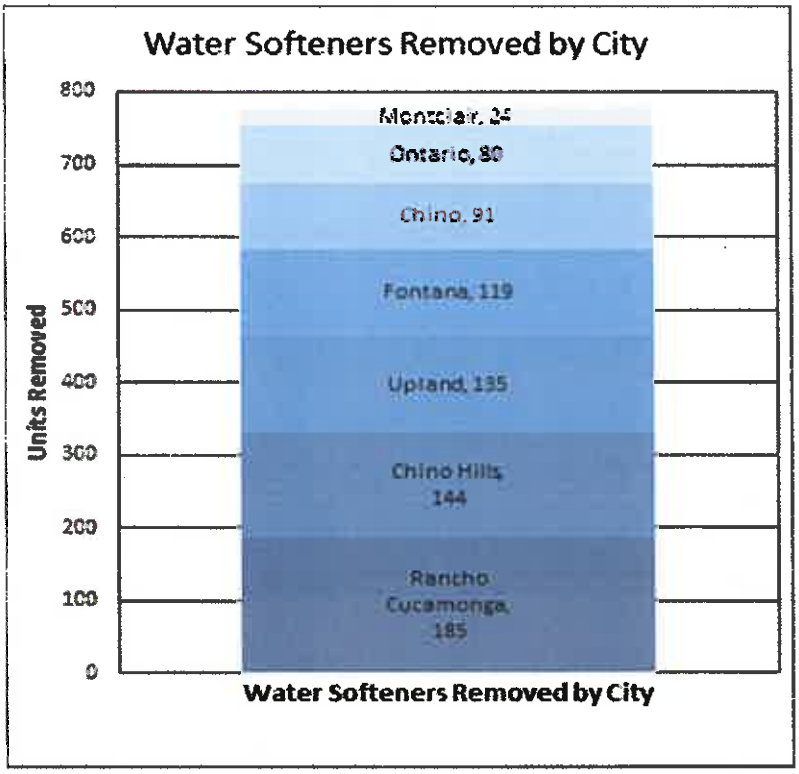
- Daily Bulletin - AWS - November 2015
- 4'x7' Banners located at:
  - Turner Basin (English & Spanish) – July 2015 – Jan 2016 Flood Control requested the removal.
  - Carbon Canyon Facility – July 2015 - Present
  - HQ-A – July 2015 – April 2016 (damaged)

- City of Fontana TV channel KFON, website & newsletter - January 2016
- Press Release - IEUA supports National Prescription Drug Take-Back Day - April 25th
- Bill insert – Member agencies were limited on their participation to include IEUA inserts as they were focusing on drought messages and conservation tips in 2015 and most of 2016.

City of Chino	AWS	16,316	Feb/Mar 2016
CVWD	AWS	49,500	Jan/Feb 2016
City of Upland	AWS	18,000	Nov 2015
City of Chino Hills	AWS	23,000	Apr 2015

- Work with Inland Valleys Association of REALTORS to promote public education about the water softener ordinance and the availability of the rebate program.

One self-regenerating water softener releases about 30 pounds of salt into the sewer system every month. Since 2008 the Agency has removed 778 water softeners (Graph 1) keeping over 140 tons of salt every year out of the regional sewer system.



Agency Business Goal: *IEUA will strive to implement actions that enhance or promote environmental sustainability and the preservation of the region's heritage.*

PRIOR BOARD ACTION

On July 20, 2011, the IEUA Board adopted the amendment to IEUA Ordinance No. 87 prohibiting the future installation of self-regenerating water softeners.

IMPACT ON BUDGET

The Water Softener Removal Rebate Program, Project No, WR 16001, has a budget of $60,000 for Fiscal Year 2016/17.

Annual Budgets:

	Spent	Budget
2012/2013	$150,000	$200,000
2013/2014	$ 43,000	$125,000
2014/2015	$ 81,000	$100,000
2015/2016	$100,000	$100,000
2016/2017	$ 60,000	$ 60,000

Public, Legislative Affairs, and Water Resources Committee

INFORMATION ITEM 2F

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Date:	September 21, 2016
To:	The Honorable Board of Directors
Through:	Public, Legislative Affairs & Water Resources Committee *(09/14/16)*
From:	P. Joseph Grindstaff General Manager
	Chris Berch Executive Manager of Engineering/Assistant General Manager
Submitted by:	Sylvie Lee Manager of Planning & Environmental Resources
Subject:	Recycled Water Semi-Annual Update FY 2015/16 and the Annual Recycled Water Report for FY 2015/16

RECOMMENDATION

This is an informational item for the Board of Directors to review.

BACKGROUND

The Recycled Water Semi-Annual Update (attached) provides information on recycled water direct use, groundwater recharge and capital project development for Fiscal Year 2015/16. It lists the status of projects to increase reliability and demands. Of note, the Wineville recycled water pipeline is now operational and has allowed increased recharge flows for RP3 basin and new flows to Declez basin. The 2015/16 Recycled Water Annual Report accompanies the update and provides a detailed breakdown of the 32,619 acre-feet of recycled water delivered during the past fiscal year. Data are presented in the report by IEUA retail member agencies, by usage types and by customers. The report provides summaries of the program history, describes recent construction and gives an overview of the IEUA treatment plants. The report includes appendices of water quality compliance data for IEUA water recycling plants and lists individual customer uses.

PRIOR BOARD ACTION

None.

IMPACT ON BUDGET

None.

Inland Empire Utilities Agency
2015/16 RECYCLED WATER ANNUAL REPORT

Water Smart

Thinking in Terms of Tomorrow

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

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INTRODUCTION

The 2015/16 Recycled Water Annual Report for the Inland Empire Utilities Agency (IEUA) recycled water program provides annual delivery data by IEUA retail member agencies, by usage types, and by customers. The 2015/16 report is for IEUA's fiscal year, which runs from July 2015 to June 2016. The report summarizes the program history, describes recent construction, and gives an overview of the IEUA treatment plants. IEUA provides wastewater treatment for its seven member agencies: the Cities of Chino, Chino Hills, Fontana, Montclair, Ontario, and Upland and Cucamonga Valley Water District. Recycled water from the treatment process is generated and delivered to its retail water agencies for use in the IEUA service area.

IEUA owns and operates five wastewater recycling facilities that serve over 870,000 people. Figure 1 shows the IEUA service area, its member agencies, and the locations of IEUA's treatment plants. Of the five plants, four produce tertiary-treated, Title 22-quality recycled water. Of the treatment plants, RP-2 does not have any liquid treatment processes, and as such does not produce any recycled water. The general layout and capacities of the water recycling plants are discussed in the last section of the report. Appendices A and B contain the recycled water effluent monitoring data and recycled water compliance data, respectively, for the 2015 calendar year for the four recycled water facilities.

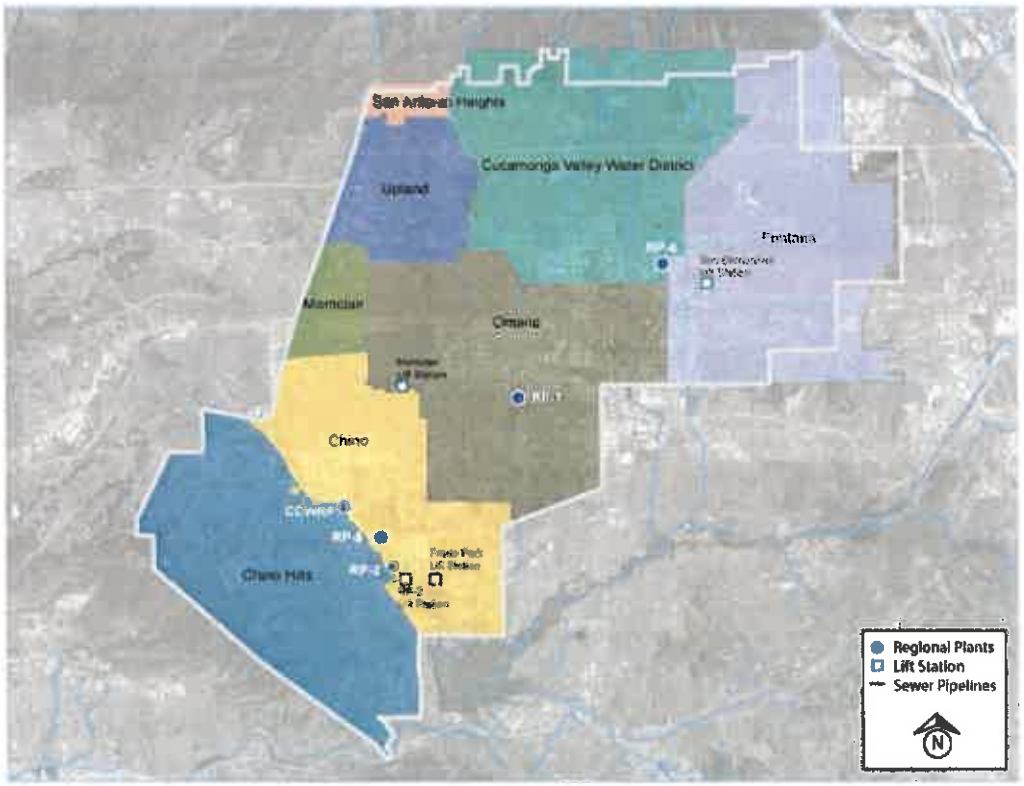

Figure 1 - IEUA Service Area

DEMANDS

During 2015/16, the average recycled water supply from IEUA's facilities was approximately 48.4 million gallons per day (MGD), or 54,169 acre-feet per year (AFY). Recycled water groundwater recharge usage was 13,222 AFY and recycled water direct usage was 19,397 AFY. Total recycled water demands during 2015/16 were 32,619 acre-feet (AF), a decrease by 3% from the previous fiscal year. Recycled water recharge was up 22% and direct use was down 14%. The recycled water delivery volumes of direct use and groundwater recharge can vary seasonally and annually based on a variety of factors (e.g. the rainfall intensity, rainfall duration, and recharge basin maintenance activities). Figure 2 shows IEUA's historical direct use and groundwater recharge of recycled water for the past 10 years.

Recycled water demands for the combined direct use and recharge purposes were approximately 43 percent of the available supply. During the peak demand summer months (July through September), the total recycled water demand was approximately 90 percent of the available supply.

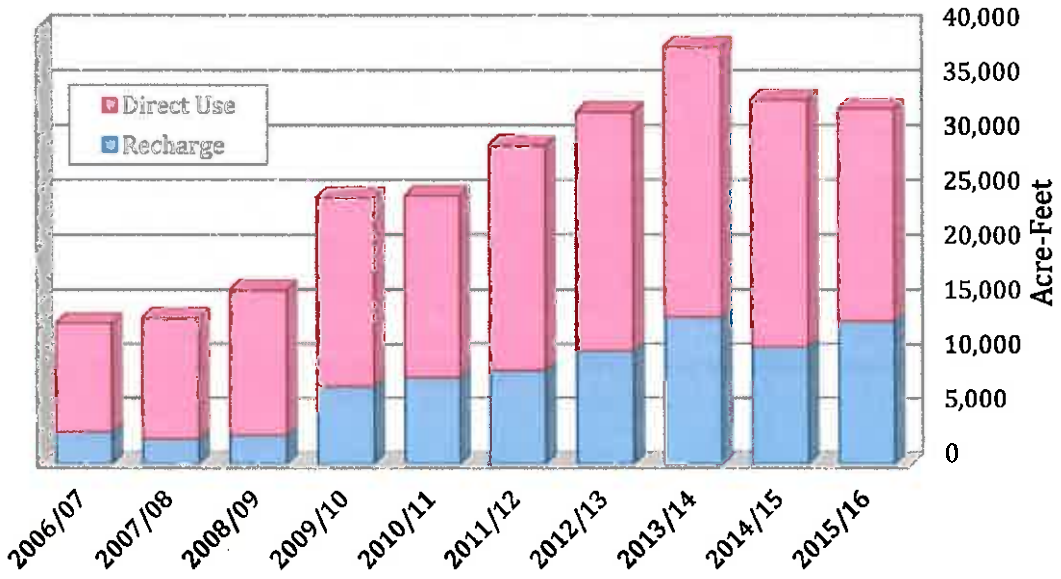

Figure 2 – Historical Recycled Water Direct Use and Groundwater Recharge

DEMANDS BY USE TYPE

Delivered recycled water was beneficially reused for a variety of applications including landscape irrigation, agricultural irrigation, industrial process water, groundwater recharge and construction. Table 1 and Figure 3 show the 2015/16 recycled water demand by use type.

Table 1 – Recycled Water Demand by Use Type for 2015/16

Type of Use	Demand (AF)	Percent of Demand
Recharge	13,222	41%
Agriculture	8,868	27%
Landscape	8,346	26%
Industrial	1,392	4%
Construction	791	2%
Total Demand	32,619	100%

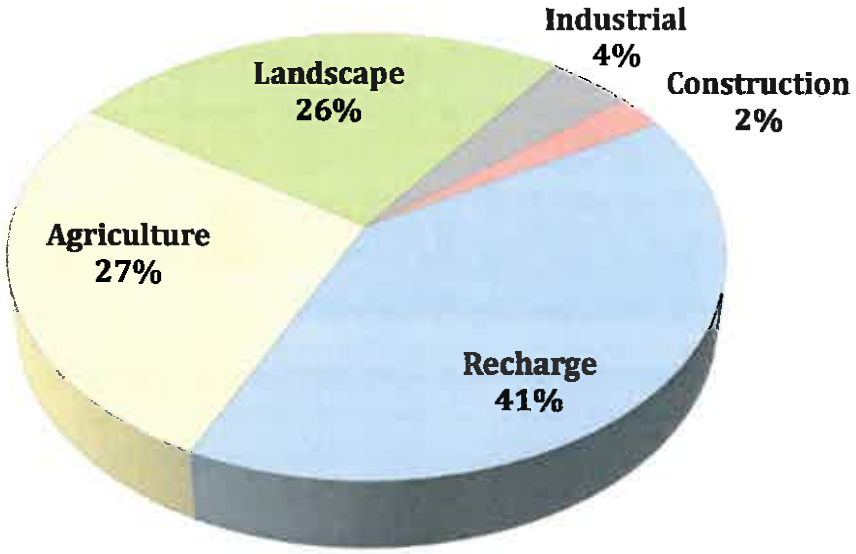

Figure 3 –Recycled Water Demand by Use Type for 2015/16

RETAIL DEMANDS

IEUA is the wholesale recycled water provider to its member agencies, which in turn are retail agencies that directly serve their customers. IEUA member agencies which served recycled water in 2015/16 include:

- City of Chino,
- City of Chino Hills,
- City of Ontario,
- Cucamonga Valley Water District (CVWD),
- Montclair (through MVWD),
- Fontana (through FWC), and
- City of Upland

Monte Vista Water District (MVWD) and Fontana Water Company (FWC) are the water retailers in the Cities of Montclair and Fontana, respectively, but are not IEUA member agencies. MVWD and FWC retail recycled water obtained from their overlying cities which are IEUA member agencies. San Bernardino County is currently a direct use customer of IEUA based on long standing historical contracts. Jurupa Community Services District (JCSD), located directly south of Fontana, is not an IEUA member agency yet will receive a recycled water groundwater recharge allocation through 2025 based on an allocation formula in a 2013 agreement between IEUA and JCSD.

Table 2 show the recycled water demand by agency. Each agency's total includes its direct use and its allocation from IEUA for recycled water groundwater recharge based on IEUA's Regional Sewage Service Contract.

Table 2 –Recycled Water Demand by Agency for 2015/16

Retail Agency	Direct Use (AF)	Recharge Allocation (AF)	Agency Total (AF)
Chino	7,217	1,302	8,519
Ontario	7,566	2,667	10,233
Chino Hills	1,394	1,097	2,491
CVWD	1,146	3,099	4,244
San Bernardino County	536	0	536
IEUA	541	0	541
Upland	719	1,226	1,945
Montclair/MVWD	278	548	827
Fontana/FWC	0	2,368	2,368
JCSD	0	915	915
Subtotal	**19,397**	**13,222**	**32,619**

CUSTOMERS DEMANDS

Appendix C lists the recycled water direct use customers of each retail agency and their demands for the fiscal year. Table 3 lists the top ten largest direct reuse customer sites for the fiscal year (excluding groundwater recharge sites). During 2015/16, one hundred and sixty eight (168) new connections were made to the recycled water system with a total new demand estimated at 1,794 AFY. Connected new demand is the anticipated annual usage based on land size and previous potable water usage history.

Table 3 –Top 10 Recycled Water Customers for 2015/16

Customer	Use (AF)	Type of Use	Retailer
Weststeyn Dairy	969	Agricultural	Chino
Cal Poly Pomona	897	Agricultural	Chino
New Indy Ontario	867	Industrial	Ontario
Lewis Farms	702	Agricultural	Ontario
Cleveland Farm	616	Agricultural	Ontario
Cleveland Farm	552	Agricultural	Chino
Whispering Lakes Golf Course	475	Landscape	Ontario
CW Farms	434	Agricultural	Chino
Nyenhius Dairy	405	Agricultural	Chino
El Prado Park	373	Landscape	San Bernardino County
Subtotal	**6,291**		

ECONOMIC AND ENVIRONMENTAL IMPACTS

The 32,619 AF of recycled water used during the fiscal year is the equivalent of the water supply for roughly 66,840 homes. The use of 2015/16 produced recycled water reduces the need to pump State Water Project water over the Tehachapi Mountains, an equivalent net energy demand reduction of 2,657 kilowatt-hours (kWh) per AF, and an overall reduction of approximately 79 percent in carbon dioxide emissions.

IEUA's wholesale recycled water rate to its member agencies for 2015/16 was $350/AF for direct usage and $410/AF for recharge. Table 4 lists the IEUA retail agencies' recycled water rates in 2015/16.

Table 4 –Retail Agency Water Rates for 2015/16

City of Chino			
Source	Usage Type	Usage (HCF)	Effective Oct. 1, 2015
Potable Water	Flat Rate	1	$1.77
Recycled Water	Non-Agricultural	1	$1.24
	Agricultural	1	$0.62

City of Chino Hills				
Source	Zone	Single Family Usage (HCF)	Multi-family Usage (HCF)	Effective July 1, 2015
Potable Water	Low	Tier 1 (0-12)	Tier 1 (0-7)	$2.28
		Tier 2 (13-30)	Tier 2 (8-20)	$2.60
		Tier 3 (>30)	Tier 3 (>21)	$3.64
	Intermediate	Tier 1 (0-12)	Tier 1 (0-7)	$2.47
		Tier 2 (13-30)	Tier 2 (8-20)	$2.79
		Tier 3 (>30)	Tier 3 (>21)	$3.83
	High	Tier 1 (0-12)	Tier 1 (0-7)	$2.76
		Tier 2 (13-30)	Tier 2 (8-20)	$3.09
		Tier 3 (>30)	Tier 3 (>21)	$4.12
Recycled Water	Low	Flat Rate		$1.91
	Intermediate			$2.04
	High			$2.25
	Temporary			$2.31

City of Ontario		
Source	Usage (HCF)	Effective March 4, 2016
Potable Water	0-15	$2.39
	>15	$2.78
Recycled Water	Flat Rate	$1.63

CVWD			
Source	Stage	Usage (HCF)	Effective July 1, 2015
Potable Water	Non-drought	Tier 1 (0-10)	$1.59
		Tier 2 (11-40)	$2.11
		Tier 3 (41-100)	$2.62
		Tier 4 (>100)	$2.99
Recycled Water		Flat Rate	$1.58

MVWD				
Source	Usage Type	Tier	Usage (HCF)	Effective March 1, 2016
Potable Water	Residential	Tier 1	Allocation	$1.86
		Tier 2	Allocation	$2.47
		Tier 3	Allocation	$4.71
		Tier 4	Allocation	$5.39
	Non-residential	Domestic Water	Flat Rate	$2.28
Recycled Water	Non-residential	Recycled Water	Flat Rate	$1.88

Fontana Water Company			
Source	Usage Type	Usage (HCF)	Effective July 1, 2015
Potable Water	Conservation Rates	Tier 1 (0-16)	$2.50
		Tier 2 (>16)	$2.88
	General Rate	1	$2.72
Recycled Water		Flat Rate	$2.04

City of Upland				
Source	Usage Type		Usage (HCF)	Effective January 1, 2016
Potable Water	Single Family Residential Rate		Tier 1 (0-20)	$1.43
			Tier 2 (21-50)	$1.70
			Tier 3 (>50)	$2.32
	Multi-Family Residential Rate		Flat Rate	$1.76
	Rates for Other Classes	Landscape:	Flat Rate	$2.03
		Commercial:		$1.69
		Schools:		$1.99
		Public Agencies:		$1.88
Recycled Water			Flat Rate	$1.52

HISTORY

Early water recycling efforts in the 1970s by IEUA involved irrigation at the Whispering Lakes Golf Course adjacent to RP-1 in Ontario and at the El Prado Park and Golf Course in Chino. In the 1980s, recycled water continued to be an integral part of IEUA planning with implementation of the CCWRF and RP-4 recycling plants. These two recycling plants were sited specifically at higher elevations to reduce recycling plants water pumping costs. A backbone recycled water distribution system was installed in Chino and Chino Hills from CCWRF in 1997 and was initially operated by IEUA under Ordinance No. 63. This system was later turned over to the City of Chino and the City of Chino Hills and forms the core of the recycled water distribution network operated by these two cities.

The first major regional pipeline was constructed in 1995 and served the dual purpose of a regional recycled water distribution pipeline and an outfall allowing RP-4 effluent to be discharged with RP-1 effluent into Cucamonga Creek. The RP-4 outfall was designed as a pressurized system so that water could be pumped up from RP-1 to RP-4 as well as flow down in the opposite direction from RP-4 to RP-1 and the creek outfall.

In 1999, IEUA began groundwater recharge with recycled water at Ely Basin. The initial Ely Basin project was followed by the Chino Basin Watermaster's (CBWM) development of the Optimum Basin Management Program (OBMP) and the region's efforts (including IEUA's) to implement the OBMP. In 2000, the OBMP identified recycled water use as a critical component in drought-proofing and maintaining the region's economic growth. With imported water rates increasing and long-term supply reliability declining, the region committed to aggressively and proactively address regional impacts. The OBMP set the path for the development of a regional recycled water distribution system and a Recycled Water Implementation Plan.

The use of recycled water presented several advantages to IEUA and its member agencies: it is one of the most significant unused local water supplies; it is reliable during drought and climate change conditions; and it requires significantly less energy than imported water to deliver to customers thus reduces greenhouse gas emissions. IEUA in partnership with its member agencies and CBWM invested approximately $625 million since 200 to increase the availability of local water supplies through water recycling, conservation, recharge improvements, the MWD groundwater storage and recovery project, the Chino Desalter, and other water management programs.

In 2002, IEUA Board of Directors adopted Ordinance No. 75, the Mandatory Use Ordinance, to establish incentives and encourage recycled water use from the regional distributions system. Also in 2002, the CBWM, Chino Basin Water Conservation District (CBWCD), San Bernardino County Flood Control District (SBCFCD) and IEUA joined forces to greatly

expand groundwater recharge capacity through the Chino Basin Facilities Improvement Program.

In 2005, IEUA was permitted by the Regional Water Quality Control Board to operate its recycled water groundwater recharge programs at five additional recharge basins (Banana, Hickory, Etiwanda Conservation Ponds, Declez, RP3, and Turner basins). In 2007, IEUA was permitted to operate its recycled water groundwater recharge program at seven more recharge sites (Brooks, 8th Street, Victoria, Lower Day, San Sevaine, Etiwanda Spreading Grounds (later reconfigured as the Etiwanda Debris Basin) and Ely Basins. The 2007 permit was amended in 2009 to modify how IEUA tracks diluent water and recycled water blending, which effectively increased IEUA's ability to recharge using recycled water.

In November 2007, IEUA and its member agencies unanimously adopted the Three Year Recycled Water Business Plan. IEUA and its member agencies committed to implementing the plan, which laid out a focused and cost-effective approach to rapidly increase the availability and use of recycled water within IEUA's service area.

Based on the series of regional decisions since 2000, over $350 million was invested into the implementation of a robust Recycled Water Program. The region has achieved program success by leveraging heavily on grant funding and loans. With unanimous regional support, annual recycled water use grew from approximately 5,000 AF in 2004/05 to 38,251 AF in FY 2013/14. Over the past two fiscal years, recycled water demand has fallen slightly and was 32,619 AF in 2015/16.

RECYCLED WATER CAPITAL PROGRAM

IEUA currently produces nearly 50 MGD of recycled water, and there are several projects under way to expand the use of recycled water within its service area. Table 5 lists the 2015/16 recycled water capital projects and their locations. The projects that were in design or construction during 2015/16 are summarized in the following paragraphs.

Table 5 - Capital Project Summary for 2015/16

Projects in Design/Construction	Engineering Budget	Total Grants	Total Loans	FY 15/16 Expenses
San Sevaine Basin Improvements	$6,6460,00	$1,125,000	$0	$311,648
Groundwater & Recycled Water SCADA Control Upgrades	$932,000	$932,000	$0	$117,891
Wineville RW Pipeline	$31,632,218	$10,418,950	$22,206,050	$7,203,630
Subtotal	$32,564,218	$12,475,950	$22,206,050	$7,633,169

PROJECTS COMPLETED

The Wineville Recycled Water Pipeline project consists of 1 mile of 24-inch and over 5 miles of 36-inch pipelines installed in the cities of Ontario and Fontana. The pipelines delivery recycled water from the 1158 pressure zone to be used for landscape irrigation and recharge activities at RP-3 and Declez basins. The pipeline was completed in 2015 and RP3 and Declez basins began using the Wineville pipeline for deliveries in September and December, respectively. The Groundwater and Recycled Water SCADA Central Upgrades project consists of the installation of new hardware and software for 20 remote groundwater and recycled water stations which will transition communication onto a faster, more reliable network.

PROJECTS IN CONSTRUCTION

The Groundwater and Recycled Water SCADA Control Upgrades project will upgrade five obsolete programmable logic controller (PLC) hardware and software at five recharge basins that each has an inflatable rubber dam system. The project will replace the older PLCs with newer and fully supported PLCs that will extend the reliability by 10 years. This SCADA project is estimated to be completed January 2017.

PROJECTS IN DESIGN

The San Sevaine Basin Improvements project will enhance stormwater capture and recycled water recharge at the basin. The project will include a pump station at basin 5 and piping to deliver stormwater recycled water to the upper three basins. A grant application for the State Water Resources Control Board Proposition 1 funding opportunity was submitted for this project and is expected to be awarded by the end of December 2016. The San Sevaine Basin improvements are estimated to be completed in January 2018.

FUTURE REUSE PROJECTS

IEUA and its member agencies desire to increase the use of recycled water within IEUA's boundary. By implementing the Recycled Water Program Strategy, recycled water projects will increase the development of recycled water delivery, groundwater recharge, and the reliability of potable supplies for residents and customers. Future recycled water projects will allow IEUA and its member agencies to continue to provide a reliable alternate water supply to its customers to offset the demand for imported water for non-potable uses.

IEUA submitted an application for the State Water Resources Control Board Proposition 1 grant funding for water recycling projects. The projects identified in the application were: RP-1 1158 Recycled Water Pump Station Upgrades, RP-5 Recycled Water Pipeline Bottleneck, RP-1 Parallel Outfall Pipeline, Baseline Pipeline Extension, Napa Lateral, and Recycled Water Pressure Sustaining Valve Installation. Upon notification of award (anticipated to be awarded two groups in December 2016 and February 2017), these projects will begin preliminary design phases.

TREATMENT PLANTS

IEUA owns and operates five regional water recycling facilities: RP-1, RP-2, RP-4, RP-5, and CCWRF. Of the treatment plants, RP-2 does not have any liquid treatment processes, and as such does not produce any recycled water. The combined treatment capacity of the remaining four plants is approximately 85 MGD.

Regional Water Recycling Plant No. 1

RP-1 is located in the city of Ontario and has been in operation since 1948. The plant has undergone several expansions to increase the design hydraulic domestic sewage (wastewater) treatment capacity to 44 MGD. The plant serves areas of Chino, Fontana, Montclair, Ontario, Rancho Cucamonga, Upland, and solids removed from RP-4, located in Rancho Cucamonga. The plant treats an average influent wastewater flow of approximately 23 MGD. The plant is divided into two separate treatment sections: liquids and solids.

The liquid treatment section consists of preliminary screening and grit removal, primary clarification, secondary treatment by aeration basins and clarification, tertiary treatment by filtration and disinfection, and dechlorination. Wastewater liquid is treated to California Department of Public Health Title 22 Code of Regulations standards for disinfected tertiary recycled water. The solids treatment section begins with thickening the solids removed from the primary and secondary clarification processes. The thickened solids are pumped to anaerobic digestion and then to the centrifuges for dewatering. Wastewater solids are digested to a minimum Class B biosolids standard, as defined by the United States Environmental Protection Agency Code of Federal Regulations. After dewatering, the biosolids are hauled to the Inland Empire Regional Composting Facility in the City of Rancho Cucamonga for further treatment to produce Class A compost. Figure 4 illustrates the RP-1 treatment processes.

Regional Water Recycling Plant No. 1

Plant Capacity:	44.0 MGD
2015/16 Influent Flow:	23.5 MGD
2015/16 RW Delivery:	16 MGD
2015/16 Creek Discharge:	9.3 MGD*

**RP-1 and RP-4 have a combined effluent outfall; therefore, creek discharge reported for RP-1 is for both plants combined.*

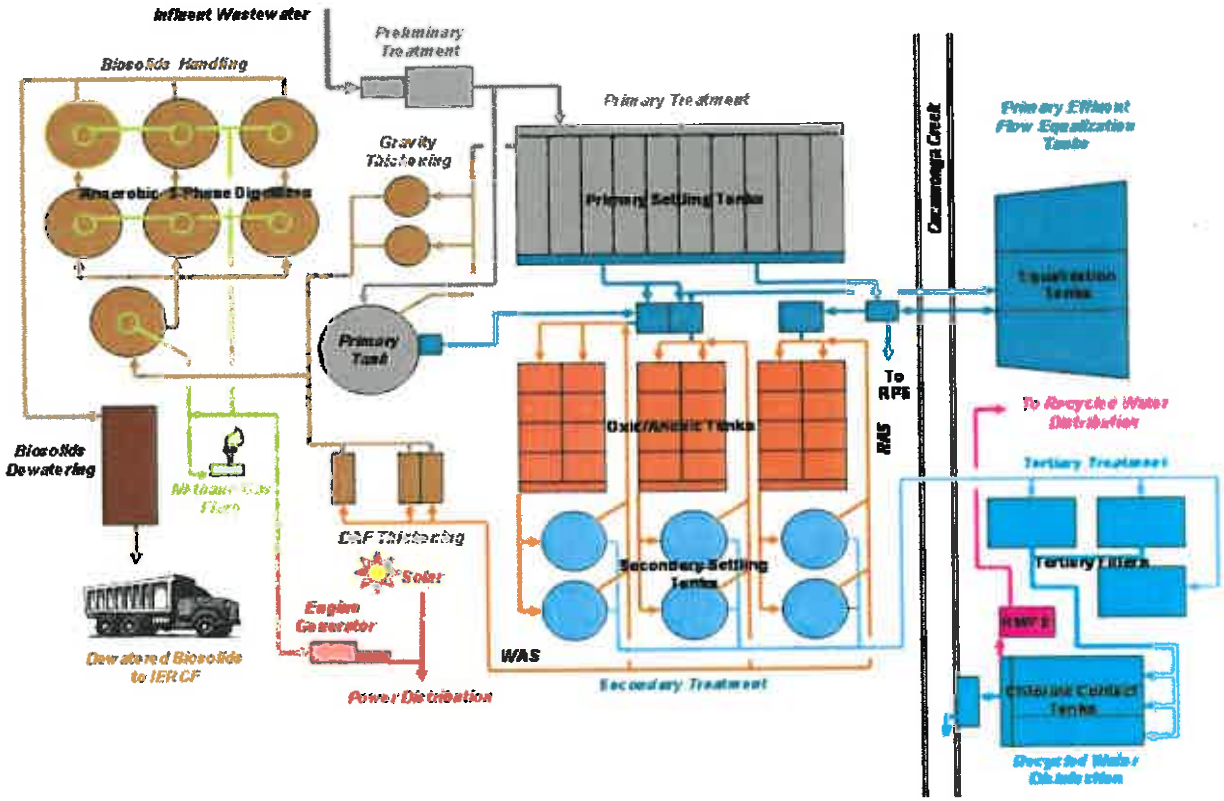

Figure 4 - RP-1 Treatment Process

Regional Water Recycling Plant No. 4

RP-4 is located in the city of Rancho Cucamonga and has been in operation since 1997. The plant has undergone an expansion to increase the design hydraulic domestic sewage (wastewater) treatment capacity to 14 MGD. The plant serves areas of Fontana, Rancho Cucamonga, and San Bernardino County. The plant treats the liquid portion of an average influent wastewater flow of approximately 10 MGD.

The liquid treatment section consists of preliminary screening and grit removal, primary clarification, secondary treatment by aeration basins and clarification, and tertiary treatment by filtration and disinfection. Wastewater liquid is treated to California Department of Public Health Title 22 Code of Regulations standards for disinfected tertiary recycled water. The solids removed from RP-4 are conveyed by gravity through the regional sewer system to the influent of RP-1 for thickening, anaerobic digestion, and dewatering. Figure 5 illustrates the RP-4 treatment process. Tertiary water from RP-1 and RP-4 that is not utilized for direct sales or groundwater recharge is discharged to Cucamonga Creek at RP-1.

Regional Water Recycling Plant No. 4

Plant Capacity:	14.0 MGD
2015/16 Influent Flow:	10.0 MGD
2015/16 RW Delivery:	8.4 MGD
2015/16 Creek Discharge:	0.0 MGD*

**RP-1 and RP-4 have a combined effluent outfall; therefore, creek discharge reported for RP-1 is for both plants combined.*

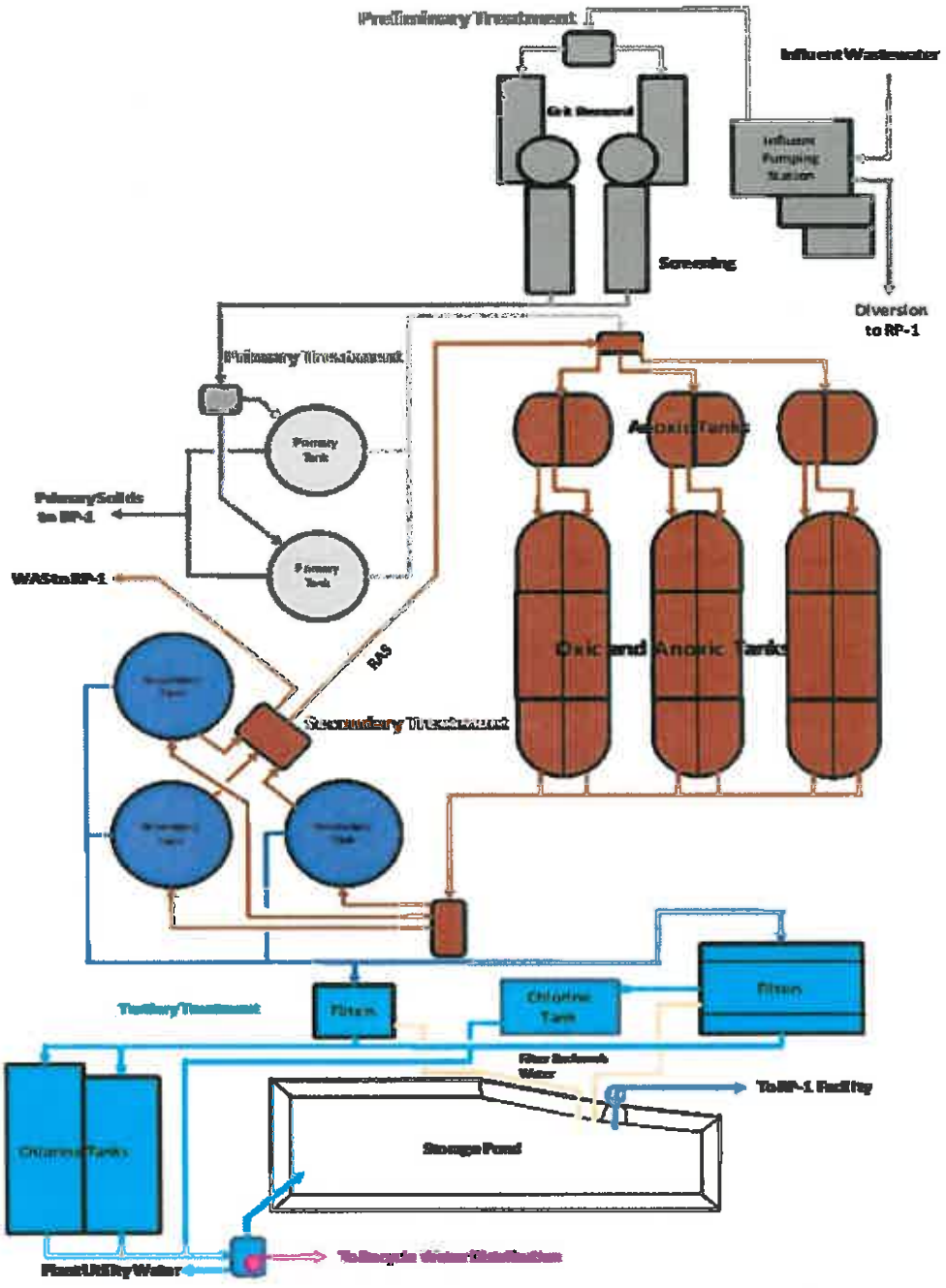

Figure 5 - RP-4 Treatment Process

Carbon Canyon Water Recycling Facility

CCWRF is located in the city of Chino and has been in operation since 1992. The design hydraulic domestic sewage (wastewater) treatment capacity was 11.4 million gallons per day until April 2014 when the facility's design capacity was re-rated based on an updated filter loading rate, which removed the tertiary filters as the bottleneck in the plant. The re-rating increased the plant capacity to 12.0 MGD. The updated capacity will be included in the 2015 NPDES permit renewal. The plant serves areas of Chino, Chino Hills, Montclair and Upland. The plant treats the liquid portion of an average influent wastewater flow of approximately 7 MGD.

The liquid treatment section consists of preliminary screening and grit removal, primary clarification, secondary treatment by aeration basins and clarification, tertiary treatment by filtration and disinfection, and dechlorination. Wastewater liquid is treated to California Department of Public Health Title 22 Code of Regulations standards for disinfected tertiary recycled water. The solids removed from CCWRF are pumped to RP-2 for thickening, anaerobic digestion, and dewatering. Figure 6 illustrates the CCWRF treatment process.

Carbon Canyon Water Recycling Facility

Plant Capacity:	11.4 MGD
2015/16 Influent Flow:	6.9 MGD
2015/16 RW Delivery:	3.5 MGD
2015/16 Creek Discharge:	3.2 MGD

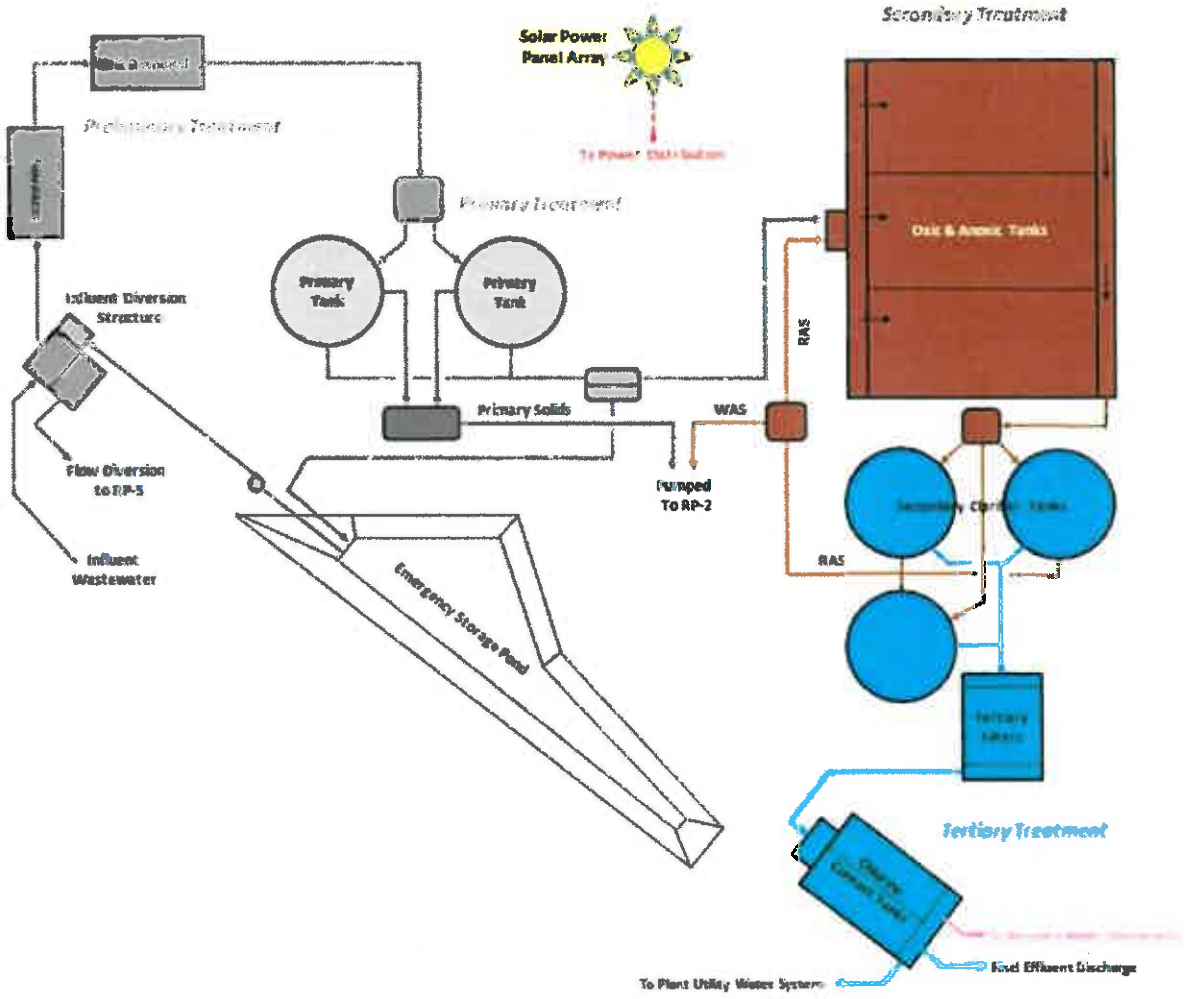

Figure 6 - CCWRF Treatment Process

Regional Water Recycling Plant No. 5

RP-5 is located in the city of Chino and has been in operation since 2004. The design hydraulic domestic sewage (wastewater) treatment capacity is 15 MGD, which includes 1.3 MGD of solids processing returned from RP-2. The plant serves areas of Chino, Chino Hills, and Ontario. The plant treats the liquid portion of an average influent wastewater flow, including RP-2 returned flow, of approximately 8 MGD.

The liquid treatment section consists of preliminary screening and grit removal, primary clarification, secondary treatment by aeration basins and clarification, tertiary treatment by filtration and disinfection, and dechlorination. Wastewater liquid is treated to California Department of Public Health Title 22 Code of Regulations standards for disinfected tertiary recycled water. The solids removed from RP-5 are pumped to RP-2 for thickening, anaerobic digestion, and dewatering. Figure 7 illustrates the RP-5 treatment process.

Regional Water Recycling Plant No. 5

Plant Capacity:	15.0 MGD
2015/16 Influent Flow:	8.0 MGD
2015/16 RW Delivery:	3.2 MGD
2015/16 Creek Discharge:	2.7 MGD

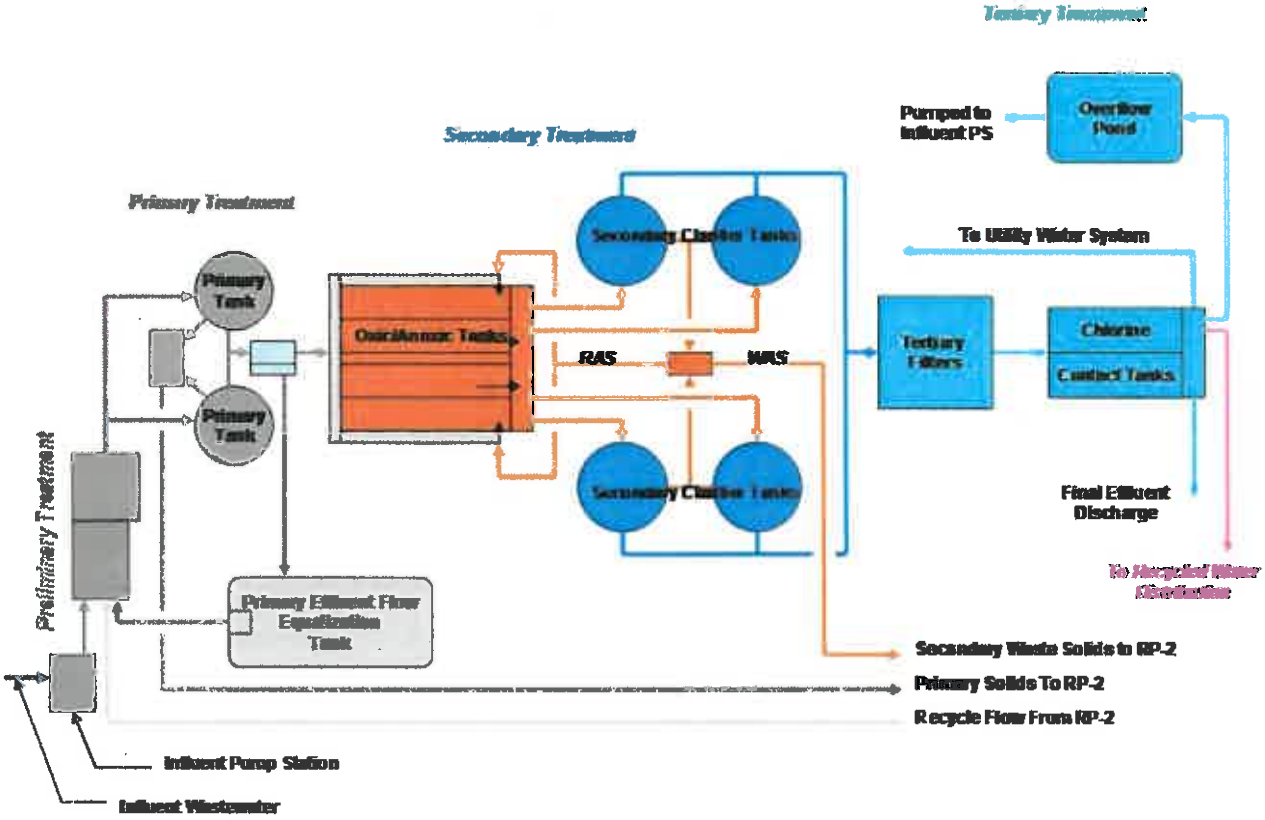

Figure 7 - RP-5 Treatment Process

APPENDIX A

RECYCLED WATER

EFFLUENT MONITORING DATA

FOR CALENDAR YEAR 2015

RP-1 (M-001A* & M-001B) Effluent Monitoring Data — **Table No. 3a**

	Flow			EC			pH			BOD_5				TSS				TOC			TDS			TIN			TN			NH_3-N (grab)		
	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg Dis	Avg	Min	Max	Avg Dis	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max
Date	MGD			µmhos/cm			unit			mg/L			%	mg/L			%	mg/L			mg/L			mg/L			mg/L			mg/L		
Limit>>>							6.5 -8.5			20			15	20			15													4.5		
Jan-15	2.3	0.0	4.0	877	815	956	7.0	6.8	7.3	<2	<2	<2	0.5	<2	<2	<2	0.5	5.9	5.4	6.6	584	504	712	9.6	7.0	13.6	10.5	8.8	15.0	<0.1	<0.1	<0.1
Feb-15	2.6	0.0	8.0	934	799	1,154	7.1	6.5	7.3	<2	<2	<2	0.6	<2	<2	<2	0.5	6.0	4.3	6.7	571	550	614	7.6	4.8	11.3	9.1	6.5	12.6	<0.1	<0.1	<0.1
Mar-15	1.9	1.6	2.0	853	784	898	7.0	6.6	7.4	<2	<2	<2	0.4	<2	<2	<2	0.4	5.4	4.8	6.0	548	524	576	6.7	2.4	11.9	7.3	3.5	12.0	<0.1	<0.1	<0.1
Apr-15	2.3	0.0	4.2	960	844	1,116	7.0	6.6	7.3	<2	<2	2	0.4	<2	<2	<2	0.5	5.4	3.8	6.1	566	542	590	5.8	4.2	7.8	7.2	6.0	8.8	<0.1	<0.1	<0.1
May-15	2.0	1.3	2.8	878	835	928	7.1	6.5	7.2	<2	<2	<2	0.3	<2	<2	<2	0.4	5.6	4.2	6.4	541	524	562	7.6	6.3	8.7	8.6	7.6	9.8	<0.1	<0.1	<0.1
Jun-15	3.0	1.7	5.0	920	854	1,063	7.3	6.9	7.6	<2	<2	<2	0.4	<2	<2	<2	0.5	5.4	4.7	5.9	558	530	578	4.9	2.6	8.2	5.8	3.8	8.2	<0.1	<0.1	<0.1
Jul-15	2.7	1.5	3.5	774	287	874	7.2	7.0	7.7	<2	<2	2	0.5	<2	<2	<2	0.5	5.0	4.6	5.7	529	510	544	6.0	4.5	7.6	6.9	5.9	7.6	<0.1	<0.1	<0.1
Aug-15	1.9	0.5	3.0	874	718	968	7.2	6.6	7.9	<2	<2	<2	0.5	<2	<2	<2	0.5	4.8	4.6	5.0	533	514	554	5.4	4.5	6.5	6.7	5.4	7.3	<0.1	<0.1	<0.1
Sep-15	3.3	1.8	6.0	870	589	1,112	7.2	6.6	7.3	<2	<2	<2	0.5	<2	<2	<2	0.4	4.9	4.6	5.5	538	524	566	5.4	3.6	8.0	6.0	4.5	8.4	<0.1	<0.1	<0.1
Oct-15	1.8	0.0	2.4	1,077	1,023	1,097	7.2	6.6	7.7	<2	<2	<2	0.6	<2	<2	<2	0.5	5.3	4.7	5.9	526	522	532	5.2	3.0	6.8	6.4	6.1	7.0	<0.1	<0.1	<0.1
Nov-15	3.0	2.0	3.5	1,085	944	1,142	7.2	7.0	7.3	<2	<2	<2	0.5	<2	<2	<2	0.4	4.9	4.6	5.4	526	504	538	6.0	3.5	7.8	6.2	3.5	7.4	<0.1	<0.1	<0.1
Dec-15	3.3	2.4	3.8	871	672	950	7.1	6.9	7.3	<2	<2	<2	0.6	<2	<2	<2	0.6	5.2	4.6	5.9	518	492	542	6.7	3.9	8.9	7.2	6.2	8.1	<0.1	<0.1	<0.1
Avg	**2.5**	**1.1**	**4.0**	**914**	**764**	**1,021**	**7.1**	**6.7**	**7.5**	**<2**	**<2**	**<2**	**0.5**	**<2**	**<2**	**<2**	**0.5**	**5.3**	**4.6**	**5.9**	**545**	**520**	**576**	**6.4**	**4.2**	**8.9**	**7.3**	**5.7**	**9.4**	**<0.1**	**<0.1**	**<0.1**
Min	**1.8**	**0.0**	**2.0**	**774**	**287**	**874**	**7.0**	**6.5**	**7.2**	**<2**	**<2**	**<2**	**0.3**	**<2**	**<2**	**<2**	**0.4**	**4.8**	**3.8**	**5.0**	**518**	**492**	**532**	**4.9**	**2.4**	**6.5**	**5.8**	**3.5**	**7.0**	**<0.1**	**<0.1**	**<0.1**
Max	**3.3**	**2.4**	**8.0**	**1,085**	**1,023**	**1,154**	**7.3**	**7.0**	**7.9**	**<2**	**<2**	**2**	**0.6**	**<2**	**<2**	**<2**	**0.6**	**6.0**	**5.4**	**6.7**	**584**	**550**	**712**	**9.6**	**7.0**	**13.6**	**10.5**	**8.8**	**15.0**	**<0.1**	**<0.1**	**<0.1**

*M-001A is the compliance point for continuous monitoring parameters, TDS, and toxicity.

RP-1/RP-4 (M-002A) Effluent Monitoring Data — **Table No. 3b**

	Flow			EC			pH			BOD_5				TSS				TOC			TDS			TIN			TN			NH_3-N (grab)		
	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg Dis	Avg	Min	Max	Avg Dis	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max
Date	MGD			µmhos/cm			unit			mg/L			%	mg/L			%	mg/L			mg/L			mg/L			mg/L			mg/L		
Limit>>>							6.5 -8.5			20			15	20			15													4.5		
Jan-15	17.8	6.9	30.7	1,056	1,019	1,090	6.8	6.6	7.0	<2	<2	<2	0.6	<2	<2	<2	0.5	5.8	5.2	6.2	552	508	584	9.0	6.3	13.6	9.1	9.1	9.1	<0.1	<0.1	<0.1
Feb-15	10.4	1.6	31.1	1,006	899	1,079	7.0	6.6	7.3	<2	<2	<2	0.5	<2	<2	<2	0.6	5.9	4.2	6.8	576	560	618	6.8	3.3	10.9	7.8	7.8	7.8	<0.1	<0.1	<0.1
Mar-15	12.9	2.1	33.4	931	903	987	6.8	6.7	7.1	<2	<2	<2	0.4	<2	<2	<2	0.5	5.3	4.7	6.0	542	534	556	6.1	1.9	11.8	7.1	7.1	7.1	<0.1	<0.1	<0.1
Apr-15	11.4	1.2	28.3	884	854	938	7.0	6.8	7.3	<2	<2	<2	0.4	<2	<2	<2	0.6	5.3	4.0	6.1	538	516	550	4.9	3.2	6.8	4.8	4.8	4.8	<0.1	<0.1	0.1
May-15	10.6	1.1	28.8	1,124	892	1,192	7.1	6.5	7.3	<2	<2	2	0.3	<2	<2	<2	0.5	5.6	5.0	8.5	532	522	552	7.1	5.2	9.3	7.7	7.7	7.7	<0.1	<0.1	0.1
Jun-15	2.8	0.4	9.7	1,048	824	1,149	7.2	7.0	7.3	<2	<2	<2	0.4	<2	<2	<2	0.5	5.1	4.5	5.6	518	500	546	4.3	1.5	7.4	6.4	6.4	6.4	<0.1	<0.1	<0.1
Jul-15	3.6	0.5	22.7	831	772	1,031	7.1	6.6	7.3	<2	<2	2	0.5	<2	<2	<2	0.5	4.8	4.3	5.3	507	494	524	5.7	4.3	7.6	7.2	7.2	7.2	<0.1	<0.1	<0.1
Aug-15	1.2	0.2	10.5	853	790	894	7.1	6.5	7.3	<2	<2	<2	0.5	<2	<2	<2	0.6	4.6	4.3	4.9	523	506	542	5.1	3.2	6.7	6.6	6.6	6.6	<0.1	<0.1	<0.1
Sep-15	7.5	0.1	29.5	823	760	878	7.1	6.7	7.3	<2	<2	<2	0.6	<2	<2	<2	0.5	4.6	4.2	5.0	501	470	516	4.5	2.3	7.5	8.0	8.0	8.0	<0.1	<0.1	<0.1
Oct-15	11.0	1.7	29.3	835	804	863	7.2	7.0	7.3	<2	<2	<2	0.6	<2	<2	<2	0.6	5.0	4.5	5.7	503	480	524	4.7	2.5	7.1	3.3	3.3	3.3	<0.1	<0.1	<0.1
Nov-15	17.3	10.6	26.5	814	776	842	7.2	7.0	7.3	<2	<2	<2	0.5	<2	<2	<2	0.5	4.7	4.3	5.0	496	468	532	5.1	2.8	7.1	6.2	6.2	6.2	<0.1	<0.1	<0.1
Dec-15	14.8	2.5	33.4	801	770	887	7.0	6.8	7.2	<2	<2	<2	0.6	<2	<2	<2	0.6	5.0	4.6	5.6	491	482	516	6.2	2.7	9.0	5.8	5.8	5.8	<0.1	<0.1	<0.1
Avg	**10.1**	**2.4**	**26.2**	**917**	**838**	**986**	**7.1**	**6.7**	**7.2**	**<2**	**<2**	**<2**	**0.5**	**<2**	**<2**	**<2**	**0.5**	**5.1**	**4.5**	**5.9**	**523**	**503**	**547**	**5.8**	**3.3**	**8.7**	**6.7**	**6.7**	**6.7**	**<0.1**	**<0.1**	**<0.1**
Min	**1.2**	**0.1**	**9.7**	**801**	**760**	**842**	**6.8**	**6.5**	**7.0**	**<2**	**<2**	**<2**	**0.3**	**<2**	**<2**	**<2**	**0.5**	**4.6**	**4.0**	**4.9**	**491**	**468**	**516**	**4.3**	**1.5**	**6.7**	**3.3**	**3.3**	**3.3**	**<0.1**	**<0.1**	**<0.1**
Max	**17.8**	**10.6**	**33.4**	**1,124**	**1,019**	**1,192**	**7.2**	**7.0**	**7.3**	**<2**	**<2**	**2**	**0.6**	**<2**	**<2**	**<2**	**0.6**	**5.9**	**5.2**	**8.5**	**576**	**560**	**618**	**9.0**	**6.3**	**13.6**	**9.1**	**9.1**	**9.1**	**<0.1**	**<0.1**	**0.1**

RP-5 (M-003) Effluent Monitoring Data — Table No. 3c

	Flow			EC			pH			BOD_5				TSS				TOC			TDS			TIN			TN			NH_3-N (grab)		
	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg Dis	Avg	Min	Max	Avg Dis	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max
Date	MGD			µmhos/cm			unit			mg/L			%	mg/L			%	mg/L			mg/L			mg/L			mg/L			mg/L		
Limit>>>							6.5 -8.5			20			15	20			15													4.5		
Jan-15	9.8	7.0	12.8	1,014	909	1,202	7.0	6.8	7.1	<2	<2	<2	0.9	<2	<2	3	1.0	5.1	4.7	6.5	555	520	586	7.9	5.5	17.3	9.0	9.0	9.0	<0.1	<0.1	<0.1
Feb-15	9.9	6.1	12.9	1,090	969	1,208	6.9	6.6	7.2	<2	<2	<2	0.5	<2	<2	4	0.9	5.3	4.5	5.8	573	558	584	8.9	5.8	21.5	6.6	6.6	6.6	<2.4	<0.1	22.2
Mar-15	4.5	2.0	8.5	1,063	1,010	1,157	7.0	6.7	7.3	<2	<2	<2	0.6	<2	<2	2	0.9	4.9	4.3	5.2	562	536	594	7.0	5.7	9.2	10.1	10.1	10.1	0.2	<0.1	0.2
Apr-15	2.7	0.0	5.0	1,008	901	1,125	6.9	6.7	7.1	<2	<2	<2	0.4	<2	<2	2	0.7	4.8	4.4	5.4	585	554	638	6.8	4.8	8.9	8.3	8.3	8.3	0.2	0.2	0.3
May-15	3.9	1.9	5.8	996	908	1,136	6.9	6.8	7.1	<2	<2	3	0.4	<2	<2	3	0.6	4.9	4.4	5.3	550	532	566	5.1	3.9	6.2	6.4	6.4	6.4	0.2	<0.1	0.2
Jun-15	0.7	0.0	3.0	918	803	1,093	7.0	6.7	7.3	<2	<2	<2	0.4	<2	<2	<2	0.6	5.0	4.5	5.3	596	596	596	6.4	5.2	7.5	8.7	8.7	8.7	0.1	<0.1	0.2
Jul-15	0.0	0.0	0.0	960	888	1,019	7.1	6.8	7.3	<2	<2	<2	0.6	<2	<2	<2	0.7	4.9	4.5	5.3				6.3	5.5	7.3						
Aug-15	0.0	0.0	0.0	910	788	960	7.1	7.0	7.2	<2	<2	<2	0.7	<2	<2	<2	1.0	5.1	4.7	5.7				6.5	5.7	7.1						
Sep-15	1.1	0.0	4.2	918	614	1,069	7.1	6.8	7.6	<2	<2	<2	0.8	<2	<2	<2	1.0	4.7	4.1	5.3	555	544	564	6.8	5.8	8.1	7.0	7.0	7.0	<0.1	<0.1	<0.1
Oct-15	2.9	2.0	5.0	982	827	1,098	7.0	6.7	7.4	<2	<2	<2	0.7	<2	<2	6	1.2	4.7	4.4	5.1	548	542	554	6.8	5.1	9.5	8.2	8.2	8.2	<0.1	<0.1	<0.1
Nov-15	2.8	1.4	5.6	1,029	942	1,075	6.9	6.8	7.1	<2	<2	2	0.7	<2	<2	2	0.8	4.8	4.4	5.3	547	540	550	6.4	5.6	7.9	5.6	5.6	5.6	<0.1	<0.1	<0.1
Dec-15	3.4	1.9	5.8	1,076	1,001	1,165	6.9	6.8	7.1	<2	<2	<2	0.6	<2	<2	<2	0.7	4.8	4.4	5.2	528	502	542	7.3	6.0	8.4	9.2	9.2	9.2	<0.1	<0.1	<0.1
Avg	**3.5**	**1.9**	**5.7**	**997**	**880**	**1,109**	**7.0**	**6.8**	**7.2**	**<2**	**<2**	**<2**	**0.6**	**<2**	**<2**	**3**	**0.8**	**4.9**	**4.4**	**5.5**	**560**	**542**	**577**	**6.8**	**5.4**	**9.9**	**7.9**	**7.9**	**7.9**	**<0.4**	**<0.1**	**2.4**
Min	**0.0**	**0.0**	**0.0**	**910**	**614**	**960**	**6.9**	**6.6**	**7.1**	**<2**	**<2**	**<2**	**0.4**	**<2**	**<2**	**<2**	**0.6**	**4.7**	**4.1**	**5.1**	**528**	**502**	**542**	**5.1**	**3.9**	**6.2**	**5.6**	**5.6**	**5.6**	**<0.1**	**<0.1**	**<0.1**
Max	**9.9**	**7.0**	**12.9**	**1,090**	**1,010**	**1,208**	**7.1**	**7.0**	**7.6**	**<2**	**<2**	**3**	**0.9**	**<2**	**<2**	**6**	**1.2**	**5.3**	**4.7**	**6.5**	**596**	**596**	**638**	**8.9**	**6.0**	**21.5**	**10.1**	**10.1**	**10.1**	**<2.4**	**0.2**	**22.2**

*Lab EC data used

CCWRF (M-004) Effluent Monitoring Data — Table No. 3d

	Flow			EC			pH			BOD_5				TSS				TOC			TDS			TIN			TN			NH_3-N (grab)		
	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg Dis	Avg	Min	Max	Avg Dis	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max
Date	MGD			µmhos/cm			unit			mg/L			%	mg/L			%	mg/L			mg/L			mg/L			mg/L			mg/L		
Limit>>>							6.5 -8.5			20			15	20			15													4.5		
Jan-15	6.8	5.3	7.5	861	673	913	7.2	6.9	8.1	<2	<2	<2	0.6	<2	<2	3	0.7	4.6	4.0	5.6	568	530	598	4.4	3.2	5.3	6.6	6.6	6.6	<0.1	<0.1	<0.1
Feb-15	2.4	0.2	7.2	907	666	1,000	7.1	6.5	7.4	<2	<2	<2	0.5	<2	<2	4	0.7	4.9	4.3	5.9	611	556	674	3.9	2.8	4.8	5.2	5.2	5.2	<0.1	<0.1	<0.1
Mar-15	1.9	0.4	5.6	888	496	972	7.1	6.7	8.2	<2	<2	<2	0.4	<2	<2	4	0.6	4.7	4.3	6.0	578	520	622	3.8	2.7	4.9	5.0	5.0	5.0	<0.1	<0.1	<0.1
Apr-15	1.3	0.5	5.3	1,026	893	1,092	6.9	6.6	7.2	<2	<2	<2	0.3	<2	<2	3	0.8	4.3	3.9	5.3	588	560	606	3.6	2.9	4.6	5.0	5.0	5.0	<0.1	<0.1	<0.1
May-15	3.2	0.7	7.6	959	824	1,059	7.0	6.7	7.2	<2	<2	<2	0.3	<2	<2	3	0.6	4.4	3.9	4.8	562	536	586	3.5	2.3	5.1	4.6	4.6	4.6	<0.1	<0.1	0.2
Jun-15	1.8	0.7	7.2	871	816	975	6.9	6.6	7.1	<2	<2	<2	0.4	<2	<2	3	0.6	4.5	4.0	5.3	561	538	582	3.7	2.8	5.2	5.2	5.2	5.2	<0.1	<0.1	<0.1
Jul-15	1.8	1.1	6.0	1,098	959	1,184	6.9	6.6	7.2	<2	<2	<2	0.5	<2	<2	6	0.7	5.4	4.6	7.1	571	550	578	3.0	1.0	4.7	4.3	4.3	4.3	<0.1	<0.1	<0.1
Aug-15	1.6	0.7	7.2	1,213	1,110	1,305	6.8	6.6	7.0	<2	<2	<2	0.6	<3	<2	13	1.6	5.5	3.7	7.2	598	564	638	3.6	2.1	5.2	4.2	4.2	4.2	<0.1	<0.1	<0.1
Sep-15	2.2	1.0	4.4	1,130	1,100	1,179	6.8	6.6	7.0	<2	<2	2	0.7	<2	<2	5	0.7	5.6	5.1	6.0	598	566	644	3.9	2.5	4.9	5.6	5.6	5.6	<0.1	<0.1	<0.1
Oct-15	2.4	1.2	6.8	1,052	970	1,153	6.9	6.6	7.1	<2	<2	<2	0.5	<2	<2	3	0.7	6.1	5.2	7.2	586	566	604	5.6	3.8	6.9	6.4	6.4	6.4	<0.1	<0.1	<0.1
Nov-15	3.6	1.6	7.2	960	720	999	7.0	6.8	8.2	<2	<2	<2	0.6	<2	<2	<2	0.8	5.2	4.8	5.4	579	550	600	5.6	4.3	7.4	7.4	7.4	7.4	<0.1	<0.1	<0.1
Dec-15	4.0	1.8	7.1	987	948	1,040	7.0	6.8	7.8	<2	<2	<2	0.6	<2	<2	<2	0.7	5.5	4.8	6.0	599	592	604	5.1	3.5	6.4	6.5	6.5	6.5	<0.1	<0.1	<0.1
Avg	**2.8**	**1.3**	**6.6**	**996**	**848**	**1,073**	**7.0**	**6.7**	**7.5**	**<2**	**<2**	**<2**	**0.5**	**<2**	**<2**	**4**	**0.8**	**5.1**	**4.4**	**6.0**	**583**	**552**	**611**	**4.1**	**2.8**	**5.5**	**5.5**	**5.5**	**5.5**	**<0.1**	**<0.1**	**<0.1**
Min	**1.3**	**0.2**	**4.4**	**861**	**496**	**913**	**6.8**	**6.5**	**7.0**	**<2**	**<2**	**<2**	**0.3**	**<2**	**<2**	**<2**	**0.6**	**4.3**	**3.7**	**4.8**	**561**	**520**	**578**	**3.0**	**1.0**	**4.6**	**4.2**	**4.2**	**4.2**	**<0.1**	**<0.1**	**<0.1**
Max	**6.8**	**5.3**	**7.6**	**1,213**	**1,110**	**1,305**	**7.2**	**6.9**	**8.2**	**<2**	**<2**	**2**	**0.7**	**<3**	**<2**	**13**	**1.6**	**6.1**	**5.2**	**7.2**	**611**	**592**	**674**	**5.6**	**4.3**	**7.4**	**7.4**	**7.4**	**7.4**	**<0.1**	**<0.1**	**0.2**

RP-1 (M-001A & M-001B) & RP-1/RP-4 (M-002A) Effluent Monitoring and Coliform Data — **Table No. 5a**

	001 Turbidity		002 Turbidity		001 Temp		002 Temp		001 Daily Coliform		001 7-day Median		002 Daily Coliform*		002 7-day Median		001 FLR	001 DT	001 CT	002 FLR	002 DT	002 CT
	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Max	Min	Min	Max	Min	Min
Date	NTU		NTU		°C		°C		MPN / 100 mL								gpm/ft²	min	mg-min/L	gpm/ft²	min	mg-min/L
Jan-15	0.6	0.9	0.6	0.8	23.3	24.2	22.9	23.7	<2	2	<2	<2	<2	2	<2	<2	4	123	622	4	155	710
Feb-15	0.8	1.0	0.7	1.6	23.8	24.6	23.8	24.2	<2	4	<2	2	<2	4	<2	2	4	125	633	4	150	780
Mar-15	0.5	0.6	0.5	0.7	24.9	26.1	24.4	25.7	<2	4	<2	<2	<2	4	<2	<2	4	138	623	4	161	701
Apr-15	0.5	0.6	0.5	0.6	25.7	26.8	25.5	26.5	<2	2	<2	<2	<2	2	<2	<2	4	141	591	4	161	696
May-15	0.7	0.9	0.4	0.6	26.4	27.6	25.9	26.7	<2	2	<2	<2	<2	2	<2	<2	3	163	718	3	174	771
Jun-15	0.6	1.0	0.5	0.6	28.3	29.3	27.8	28.8	<2	<2	<2	<2	<2	<2	<2	<2	3	165	721	3	172	731
Jul-15	0.5	0.6	0.4	0.6	28.8	30.2	29.0	29.9	<2	2	<2	<2	<2	2	<2	<2	3	163	654	3	166	702
Aug-15	0.6	0.8	0.4	1.3	30.0	30.7	30.0	30.7	<2	2	<2	<2	<2	2	<2	<2	3	167	695	3	158	710
Sep-15	0.7	0.9	0.6	0.7	29.6	30.8	30.0	30.8	<2	2	<2	<2	<2	2	<2	<2	3	153	603	3	134	530
Oct-15	0.7	0.9	0.6	1.6	29.1	30.0	29.1	29.9	<2	12	<2	<2	<2	12	<2	<2	3	162	667	3	141	605
Nov-15	0.7	0.9	0.6	3.0	25.8	27.9	26.0	27.9	<7	2	<2	<2	<7	2	<2	<2	3	167	616	3	138	614
Dec-15	0.7	0.9	0.7	1.0	23.4	24.8	23.8	25.1	<2	2	<2	<2	<2	2	<2	<2	4	147	493	4	139	560
Avg	0.6	0.8	0.5	1.1	26.6	27.8	26.5	27.5	<2	3	<2	<2	<2	3	<2	<2	3	151	635	3	154	676
Min	0.5	0.6	0.4	0.6	23.3	24.2	22.9	23.7	<2	<2	<2	<2	<2	<2	<2	<2	3	123	493	3	134	530
Max	0.8	1.0	0.7	3.0	30.0	30.8	30.0	30.8	<7	12	<2	2	<7	12	<2	2	4	167	721	4	174	780

Requirements for disinfected tertiary-treated recycled water Title 22 Compliance: Min: 450 mg/L-min CT & 90 min DT

*Beginning August 2009, 002 effluent coliform compliance point at M-001B (splitter box).

RP-5 (M-003) & CCWRF (M-004) Effluent Monitoring and Coliform Data — **Table No. 5b**

	003 Turbidity		004 Turbidity		003 Temp		004 Temp		003 Daily Coliform		003 7-day Median		004 Daily Coliform		004 7-day Median		003 FLR	003 DT	003 CT	004 FLR	004 DT	004 CT
	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Max	Min	Min	Max	Min	Min
Date	NTU		NTU		°C		°C		MPN / 100 mL								gpm/ft²	min	mg-min/L	gpm/ft²	min	mg-min/L
Jan-15	0.7	1.6	0.4	0.8	23.0	23.2	21.9	22.7	<2	2	<2	<2	<2	2	<2	<2	4	149	492	1	192	602
Feb-15	0.9	1.2	0.8	1.5	23.7	24.3	18.6	24.4	<2	4	<2	<2	<2	2	<2	<2	4	138	493	1	180	588
Mar-15	0.8	1.0	0.5	0.7	24.2	25.0	24.4	26.1	<2	2	<2	<2	<2	2	<2	<2	4	144	494	1	190	495
Apr-15	0.8	1.1	0.5	0.7	25.5	26.4	26.0	32.2	<2	2	<2	<2	<2	<2	<2	<2	4	168	500	1	182	538
May-15	0.7	0.9	0.5	1.0	25.7	26.2	25.4	27.5	<2	2	<2	<2	<2	2	<2	<2	4	112	558	1	163	570
Jun-15	0.6	0.7	0.5	0.7	26.8	28.2	27.2	29.1	<2	2	<2	<2	<2	<2	<2	<2	4	151	502	1	165	586
Jul-15	0.6	0.8	0.5	0.7	-	-	27.9	30.5	<2	2	<2	<2	<2	4	<2	<2	4	174	518	1	152	450
Aug-15	0.8	1.2	0.5	0.7	-	-	27.6	29.8	<2	<2	<2	<2	<2	2	<2	<2	4	186	524	2	146	486
Sep-15	0.6	0.9	0.6	0.7	30.0	30.1	28.7	29.9	<2	2	<2	<2	<2	<2	<2	<2	4	156	713	2	135	499
Oct-15	0.8	1.3	0.7	1.1	27.7	30.0	27.2	28.0	<2	2	<2	<2	<2	<2	<2	<2	4	156	477	2	127	541
Nov-15	0.8	1.0	0.6	1.0	24.0	26.0	24.2	25.1	<2	<2	<2	<2	<2	2	<2	<2	4	156	525	2	143	587
Dec-15	0.7	1.0	0.7	1.3	23.0	26.2	21.1	22.8	<2	2	<2	<2	<2	4	<2	<2	4	173	504	2	145	450
Avg	0.7	1.1	0.6	0.9	25.3	26.6	25.0	27.3	<2	2	<2	<2	<2	2	<2	<2	4	155	526	1	160	533
Min	0.6	0.7	0.4	0.7	23.0	23.2	18.6	22.7	<2	<2	<2	<2	<2	<2	<2	<2	4	112	477	1	127	450
Max	0.9	1.6	0.8	1.5	30.0	30.1	28.7	32.2	<2	4	<2	<2	<2	4	<2	<2	4	186	713	2	192	602

Requirements for disinfected tertiary-treated recycled water Title 22 Compliance: Min: 450 mg/L-min CT & 90 min DT

RP-1 (M-001A) & RP-1/RP-4 (M-002A) Effluent and Receiving Water (R-002U & R-002D) Data — Table No. 6a

	M-001A Cl_2 Residual*		M-002A Cl2 Residual*		Upstream Cucamonga Creek (R-002U)										Downstream Cucamonga Creek (R-002D)							
					DO		Temp		pH		TDS	TIN	Total Hardness	TSS	DO		Temp		pH		Total Hardness	TSS
	Avg	Max	Avg	Max	Avg	Min	Avg	Max	Min	Max	Avg	Avg	Avg	Avg	Avg	Min	Avg	Max	Min	Max	Avg	Avg
Date	mg/L				mg/L		°C		unit		mg/L	mg/L	mg/L	mg/L	mg/L		°C		unit		mg/L	mg/L
Jan-15	0.0	0.0	0.0	0.0	12.7	12.0	10.2	18.8	7.4	10.5	642	1.7	242	<2	9.4	8.4	20.4	22.2	7.2	7.7	164	<2
Feb-15	0.0	0.0	0.0	0.0	13.0	11.0	13.0	14.2	8.9	9.6	352	3.7			9.6	8.7	20.1	21.7	7.8	8.2		
Mar-15	0.0	0.0	0.0	0.0	13.0	11.0	13.0	14.2	8.9	9.6	674	1.3			9.6	8.7	20.1	21.7	7.8	8.2		
Apr-15	0.0	0.0	0.0	0.0	11.4	10.9	14.1	17.0	9.0	9.6	494	2.6	154	8	8.7	6.8	21.7	23.3	7.3	8.4	148	3
May-15	0.0	0.0	0.0	0.0	11.5	11.2	17.5	21.8	9.3	10.7	526	0.9			12.3	9.9	21.8	25.1	7.5	9.2		
Jun-15	0.0	0.0	0.0	0.0	9.8	9.2	18.4	20.4	9.0	10.6	378	1.1			8.2	7.5	21.7	23.9	8.4	9.4		
Jul-15	0.0	0.0	0.0	0.0	9.2	8.7	19.4	22.3	9.9	10.4	532	<0.2	199	5	7.1	6.4	23.5	27.7	8.7	9.4	167	3
Aug-15	0.0	0.0	0.0	0.0	10.3	9.2	20.0	22.8	10.1	11.1	524	3.2			8.0	6.5	22.0	24.0	9.3	9.4		
Sep-15	0.0	0.0	0.0	0.0	10.7	9.9	20.0	22.0	10.1	10.6	376	<0.2			9.0	8.1	25.4	27.4	8.5	9.0		
Oct-15	0.0	0.0	0.0	0.0	11.1	10.5	16.9	21.3	10.1	10.4	136	1.5	52	9	8.4	7.5	24.0	27.4	8.3	9.0	138	2
Nov-15	0.0	0.0	0.0	0.0	13.9	12.8	11.5	15.6	9.8	10.8	320	0.3			9.3	8.5	22.7	25.0	8.5	8.8		
Dec-15	0.0	0.0	0.0	0.0	13.6	10.3	7.7	17.5	7.4	10.4	395	1.4			9.5	9.1	20.6	23.0	8.0	8.7		
Avg	0.0	0.0	0.0	0.0	11.7	10.6	15.1	19.0	9.2	10.4	445	1.5	162	6	9.0	8.0	22.0	24.4	8.1	8.8	154	3
Min	0.0	0.0	0.0	0.0	9.2	8.7	7.7	14.2	7.4	9.6	136	<0.2	52	<2	7.1	6.4	20.1	21.7	7.2	7.7	138	<2
Max	0.0	0.0	0.0	0.0	13.9	12.8	20.0	22.8	10.1	11.1	674	3.7	242	9	12.3	9.9	25.4	27.7	9.3	9.4	167	3

RP-5 (M-003) & CCWRF (M-004) Effluent and Receiving Water (R-003U, R-003D, & R-004U) Data — Table No. 6b

	M-003 Cl_2 Residual*		M-004 Cl2 Residual*		Upstream Chino Creek (R-003U)										Downstream Chino Creek (R-003D)								Upstream Chino Creek (R-004U)									
					DO		Temp		pH		TDS	TIN	Total Hardness	TSS	DO		Temp		pH		Total Hardness	TSS	DO		Temp		pH		TDS	TIN	Total Hardness	TSS
	Avg	Max	Avg	Max	Avg	Min	Avg	Max	Min	Max	Avg	Avg	Avg	Avg	Avg	Min	Avg	Max	Min	Max	Avg	Avg	Avg	Min	Avg	Max	Min	Max	Avg	Avg	Avg	Avg
Date	mg/L				mg/L		°C		unit		mg/L	mg/L	mg/L	mg/L	mg/L		°C		unit		mg/L	mg/L	mg/L		°C		unit		mg/L	mg/L	mg/L	mg/L
Jan-15	0.0	0.0	0.0	0.0	8.6	7.7	21.8	22.8	9.7	10.2	522	6	179	6	7.2	6.6	20.7	22.3	6.9	7.6	214	2	13.6	11.2	18.0	23.4	10.5	13.3	702	3.2	407	40
Feb-15	0.0	0.0	0.0	0.0	11.7	10.1	16.8	24.8	8.0	11.9	1014	4.8			6.9	6.7	23.1	23.6	7.1	7.3			12.4	11.1	19.4	26.8	9.5	12.7	1062	6.9		
Mar-15	0.0	0.0	0.0	0.0	14.4	10.1	24.6	29.7	7.9	10.1	534	5.2			6.5	6.1	21.2	21.9	7.2	8.0			12.8	11.7	24.9	31.5	9.8	10.9	810	2.0		
Apr-15	0.0	0.0	0.0	0.0	15.2	7.7	24.2	27.3	7.4	9.9	606	4.1	194	2	6.8	6.2	22.4	25.0	7.4	7.6	250	15	12.5	10.9	26.8	33.3	8.4	10.6	366	4.2	170	3
May-15	0.0	0.0	0.0	0.0	11.6	10.4	25.2	27.8	7.6	7.9	590	3.1			6.9	6.4	23.0	23.7	7.0	7.4			13.5	13.1	25.8	34.5	9.0	10.9	758	0.9		
Jun-15	0.0	0.0	0.0	0.0	12.8	7.7	26.7	28.5	7.4	8.4	572	4			7.1	6.8	25.4	26.5	6.7	6.9			13.2	12.1	31.4	35.4	8.7	10.4	988	0.2		
Jul-15	0.0	0.0	0.0	0.0	13.9	10.8	27.8	30.7	7.7	8.6	586	1.1	185	69									13.3	11.4	27.1	34.7	8.2	10.2	934	0.3	581	331
Aug-15	0.0	0.0	0.0	0.0	15.1	8.6	29.2	31.6	7.5	8.9	592	4.1											11.0	7.0	29.1	34.2	8.6	10.2	964	0.2		
Sep-15	0.0	0.0	0.0	0.0	12.2	6.4	29.3	31.1	7.6	9.3	608	3.4			5.8	5.8	27.4	27.4	7.1	8.8			11.7	9.2	30.6	36.3	8.7	10.5	878	2.2		
Oct-15	0.0	0.0	0.0	0.0	9.8	7.6	27.1	28.5	7.1	8.8	566	4.3	178	4	6.2	5.8	23.0	26.5	7.1	7.4	216	11	13.2	11.7	23.1	26.5	7.2	9.3	294	1.8	131	1
Nov-15	0.0	0.0	0.0	0.0	11.2	7.2	24.7	25.6	7.2	8.4	588	6.8			7.0	6.6	18.0	20.8	7.3	7.6			13.8	10.4	22.9	25.1	7.7	9.9	708	1.9		
Dec-15	0.0	0.0	0.0	0.0	10.0	7.3	21.7	23.8	7.3	7.5	568	5.8			7.2	6.9	18.8	20.5	7.1	7.5			15.0	14.1	14.9	20.9	8.0	10.5	820	3.8		
Avg	0.0	0.0	0.0	0.0	12.2	8.4	24.9	27.7	7.7	9.2	612	4.4	184	20	6.8	6.4	22.3	23.8	7.1	7.6	227	9	13.0	11.2	24.5	30.2	8.7	10.8	774	2.3	322	94
Min	0.0	0.0	0.0	0.0	8.6	6.4	16.8	22.8	7.1	7.5	522	1.1	178	2	5.8	5.8	18.0	20.5	6.7	6.9	214	2	11.0	7.0	14.9	20.9	7.2	9.3	294	0.2	131	1
Max	0.0	0.0	0.0	0.0	15.2	10.8	29.3	31.6	9.7	11.9	1,014	6.8	194	69	7.2	6.9	27.4	27.4	7.4	8.8	250	15	15.0	14.1	31.4	36.3	10.5	13.3	1,062	6.9	581	331

* A chlorine residual of 0.0 mg/L signifies a positive sodium bisulfite residual and a negative chlorine residual.

RP-1 (REC-001) & RP-4 (REC-002) Recycled Water Data — Table No. 7a

	REC-001											REC-002										
	Flow	pH	Turbidity	CT	Daily Coliform		7-day Median		BOD	TSS	TDS	Flow	pH	Turbidity	CT	Daily Coliform		7-day Median		BOD	TSS	TDS
	Avg	Avg	Avg	Min	Avg	Max	Avg	Max	Avg	Avg	Avg	Avg	Avg	Avg	Min	Avg	Max	Avg	Max	Avg	Avg	Avg
Date	mgd	unit	NTU	mg-min/L	MPN / 100 mL				mg/L			mgd	unit	NTU	mg-min/L	MPN / 100 mL				mg/L		
Jan-15	9.2	7.0	0.6	622	<2	4	<2	<2	<2	<2	532	5.5	7.3	0.4	777	<2	2	<2	<2	<2	<2	495
Feb-15	14.9	7.1	0.8	633	<2	2	<2	<2	<2	<2	559	7.4	7.3	0.5	819	<2	2	<2	<2	<2	<2	498
Mar-15	15.0	7.0	0.5	623	<2	4	<2	<2	<2	<2	529	10.1	7.2	0.5	763	<2	2	<2	<2	<2	<2	482
Apr-15	15.4	7.0	0.5	591	<2	4	<2	2	<2	<2	517	10.6	7.1	0.5	813	<2	<2	<2	<2	<2	<2	497
May-15	14.8	7.1	0.7	718	<2	7	<2	2	<2	<2	506	9.2	7.2	0.5	534	<2	<2	<2	<2	<2	<2	498
Jun-15	19.1	7.3	0.6	721	<2	4	<2	<2	<2	<2	504	10.6	7.2	0.5	605	<2	<2	<2	<2	<2	<2	488
Jul-15	20.3	7.2	0.5	654	<2	2	<2	<2	<2	<2	477	9.6	7.3	0.6	965	<2	<2	<2	<2	<2	<2	487
Aug-15	21.2	7.2	0.6	695	<2	2	<2	<2	<2	<2	487	10.7	7.2	0.5	708	<2	<2	<2	<2	<2	<2	463
Sep-15	16.5	7.2	0.7	603	<2	4	<2	<2	<2	<2	495	9.7	7.2	0.9	579	<2	<2	<2	<2	<2	<2	473
Oct-15	13.8	7.2	0.7	667	<2	<2	<2	<2	<2	<2	482	10.1	7.1	0.7	836	<2	<2	<2	<2	<2	<2	466
Nov-15	10.0	7.2	0.7	616	<7	140	<2	<2	<2	<2	476	15.0	7.2	0.7	759	<2	2	<2	<2	<2	<2	466
Dec-15	13.3	7.1	0.7	493	<2	4	<2	<2	<2	<2	484	12.7	7.1	0.4	915	<2	<2	<2	<2	<2	<2	458
Avg	15.3	7.1	0.6	639	<2	15	<2	<2	<2	<2	504	10.1	7.2	0.5	772	<2	<2	<2	<2	<2	<2	481
Min	9.2	7.0	0.5	493	<2	<2	<2	<2	<2	<2	476	5.5	7.1	0.4	534	<2	<2	<2	<2	<2	<2	458
Max	21.2	7.3	0.8	721	<7	140	<2	2	<2	<2	559	15.0	7.3	0.9	965	<2	2	<2	<2	<2	<2	498

RP-5 (REC-003) & CCWRF (REC-004) Recycled Water Data — Table No. 7b

	REC-003											REC-004										
	Flow	pH	Turbidity	CT	Daily Coliform		7-day Median		BOD	TSS	TDS	Flow	pH	Turbidity	CT	Daily Coliform		7-day Median		BOD	TSS	TDS
	Avg	Avg	Avg	Min	Avg	Max	Avg	Max	Avg	Avg	Avg	Avg	Avg	Avg	Min	Avg	Max	Avg	Max	Avg	Avg	Avg
Date	mgd	unit	NTU	mg-min/L	MPN / 100 mL				mg/L			mgd	unit	NTU	mg-min/L	MPN / 100 mL				mg/L		
Jan-15	0.3	7.0	0.7	492	<2	2	<2	<2	<2	<2	527	0.1	7.2	0.4	602	<2	2	<2	<2	<2	<2	556
Feb-15	0.4	6.9	0.9	493	<2	4	<2	<2	<2	<2	546	3.5	7.1	0.8	588	<2	2	<2	<2	<2	<2	574
Mar-15	3.0	7.0	0.8	494	<2	2	<2	<2	<2	<2	518	2.6	7.1	0.5	495	<2	2	<2	<2	<2	<2	540
Apr-15	3.7	6.9	0.8	500	<2	2	<2	<2	<2	<2	558	2.8	6.9	0.5	538	<2	<2	<2	<2	<2	<2	560
May-15	3.6	6.9	0.7	558	<2	2	<2	<2	<2	<2	519	2.4	7.0	0.5	570	<2	2	<2	<2	<2	<2	527
Jun-15	4.9	7.0	0.6	502	<2	2	<2	<2	<2	<2	536	4.1	6.9	0.5	586	<2	<2	<2	<2	<2	<2	549
Jul-15	5.2	7.1	0.6	518	<2	2	<2	<2	<2	<2	521	4.9	6.9	0.5	450	<2	4	<2	<2	<2	<2	551
Aug-15	6.0	7.1	0.8	524	<2	<2	<2	<2	<2	<2	530	5.1	6.8	0.5	486	<2	2	<2	<2	<2	<3	573
Sep-15	3.7	7.1	0.6	713	<2	2	<2	<2	<2	<2	511	4.3	6.8	0.6	499	<2	<2	<2	<2	<2	<2	572
Oct-15	4.1	7.0	0.8	477	<2	2	<2	<2	<2	<2	526	4.2	6.9	0.7	541	<2	<2	<2	<2	<2	<2	570
Nov-15	2.8	6.9	0.8	525	<2	<2	<2	<2	<2	<2	526	3.4	7.0	0.6	587	<2	2	<2	<2	<2	<2	555
Dec-15	1.9	6.9	0.7	504	<2	2	<2	<2	<2	<2	520	2.8	7.0	0.7	450	<2	4	<2	<2	<2	<2	568
Avg	3.3	7.0	0.7	508	<2	2	<2	<2	<2	<2	528	3.4	7.0	0.6	536	<2	2	<2	<2	<2	<2	558
Min	0.3	6.9	0.6	477	<2	<2	<2	<2	<2	<2	511	0.1	6.8	0.4	450	<2	<2	<2	<2	<2	<2	527
Max	6.0	7.1	0.9	558	<2	4	<2	<2	<2	<2	558	5.1	7.2	0.8	602	<2	4	<2	<2	<2	<3	574

RP-1 (M-001B) Effluent Monthly Inorganic & Organic Data — Table No. 8a

Date	Total Hardness	HCO_3^2	B	Ca	CO_3^2	Cl	F	Mg	Na	SO_4	Cd, TR	Cr, Total	Cu, TR	Pb, TR	Hg, TR	Se, TR	Ag, TR	Zn, TR	Chlorodi-bromomethane	Bromodi-chloromethane	2,3,7,8-TCDD
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pg/L
Limits																					
Jan-15	158	150	0.2	48	0	114	0.2	9	100	63	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	24	4	19	
Feb-15	162	144	0.2	49	0	115	0.3	10	106	62	<0.25	1.1	4	<0.5	<0.05	<2	<0.25	31	5	20	
Mar-15	151	137	0.3	46	0	123	0.3	9	109	72	<0.25	0.9	3	<0.5	<0.05	<2	<0.25	27			
Apr-15	146	147	0.2	45	0	114	0.3	8	107	67	<0.25	1.6	5	<0.5	<0.05	<2	<0.25	24	5	23	
May-15	147	150	0.3	45	0	110	0.3	9	105	60	<0.25	1.1	4	<0.5	<0.05	<2	<0.25	27			
Jun-15	160	178	0.2	50	0	106	0.3	8	93	51	<0.25	1.5	4	<0.5	<0.05	<2	<0.25	24			
Jul-15	156	150	0.2	48	0	105	0.3	9	97	50	<0.25	0.7	3	<0.5	<0.05	<2	<0.25	28	4	21	
Aug-15	158	155	0.2	49	0	99	0.2	9	101	46	<0.25	<0.5	3	<0.5	<0.05	<2	<0.25	27			
Sep-15	157	148	0.2	48	0	108	0.2	9	94	47	<0.25	0.5	4	<0.5	<0.05	<2	<0.25	25			
Oct-15	153	165	0.2	48	0	101	0.2	8	97	46	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	21	3	19	0.000
Nov-15	163	159	0.2	50	0	104	0.3	9	97	51	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	29			
Dec-15	148	165	0.2	45	0	112	0.3	9	107	51	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	25			
Avg	155	154	0.2	48	0	109	0.3	9	101	55	<0.25	0.8	4	<0.5	<0.05	<2	<0.25	26	4	20	0.000
Min	146	137	0.2	45	0	99	0.2	8	93	46	<0.25	<0.5	3	<0.5	<0.05	<2	<0.25	21	3	19	0.000
Max	163	178	0.3	50	0	123	0.3	10	109	72	<0.25	1.6	5	<0.5	<0.05	<2	<0.25	31	5	23	0.000

RP-1/RP-4 (M-002A) Effluent Monthly Inorganic & Organic Data — Table No. 8b

Date	Total Hardness	HCO_3^2	B	Ca	CO_3^2	Cl	F	Mg	Na	SO_4	Cd, TR	Cr, Total	Cu, TR	Pb, TR	Hg, TR	Se, TR	Ag, TR	Zn, TR	Chlorodi-bromomethane	Bromodi-chloromethane	2,3,7,8-TCDD
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pg/L
Limits											1 mo avg; 2 max daily		14 mo avg; 20 max daily	8 mo avg; 15 max daily				120 mo avg; 150 max daily			
Jan-15	154	147	0.2	47	0	116	0.2	9	103	78	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	23	4	18	
Feb-15	161	141	0.2	49	0	107	0.3	9	113	73	<0.25	1.1	4	<0.5	<0.05	<2	<0.25	32			
Mar-15	154	131	0.3	46	0	123	0.3	9	113	87	<0.25	0.7	4	<0.5	<0.05	<2	<0.25	28			
Apr-15	151	147	0.3	47	0	112	0.3	8	112	80	<0.25	1.4	5	<0.5	<0.05	<2	<0.25	24	5	19	
May-15	145	140	0.2	44	0	112	0.3	9	109	78	<0.25	1.0	4	<0.5	<0.05	<2	<0.25	26			
Jun-15	158	172	0.2	50	0	106	0.3	8	96	68	<0.25	0.9	4	<0.5	<0.05	<2	<0.25	24			
Jul-15	160	141	0.2	49	0	107	0.3	9	104	74	<0.25	1.1	4	<0.5	<0.05	<2	<0.25	29	2	13	
Aug-15	152	129	0.2	46	0	106	0.2	9	115	102	<0.25	0.6	4	<0.5	<0.05	<2	<0.25	27			
Sep-15	159	130	0.2	49	0	107	0.2	9	108	99	<0.25	0.7	4	<0.5	<0.05	<2	<0.25	24			
Oct-15	151	164	0.2	47	0	101	0.2	8	101	63	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	21	3	18	0.000
Nov-15	160	152	0.2	49	0	102	0.3	9	101	67	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	27			
Dec-15	146	161	0.2	44	0	119	0.3	9	115	66	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	23			
Avg	154	148	0.2	47	0	110	0.3	9	108	78	<0.25	0.8	4	<0.5	<0.05	<2	<0.25	26	3	17	0.000
Min	145	129	0.2	44	0	101	0.2	8	96	63	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	21	2	13	0.000
Max	161	172	0.3	50	0	123	0.3	9	115	102	<0.25	1.4	5	<0.5	<0.05	<2	<0.25	32	5	19	0.000

*Free Cyanide is analyzed using ASTM-D7237 for analysis of aquatic free cyanide in accordance with R8-2015-0036

RP-5 (M-003) Effluent Monthly Inorganic Data — Table No. 8c

	Total Hardness	HCO_3^{2-}	B	Ca	CO_3^{2-}	Cl	F	Mg	Na	SO_4	Cd, TR	Cr, Total	Cu, TR	Pb, TR	Hg, TR	Se, TR	Ag, TR	Zn, TR	Chlorodi-bromomethane	Bromodi-chloromethane	2,3,7,8-TCDD
Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pg/L
Limits																			34 mo avg; 68 max daily		0.014 mo avg; 0.028 max
Jan-15	173	176	0.3	51	0	140	0.1	11	96	71	<0.25	<0.5	6	<0.5	<0.05	<2	<0.25	45	12	28	
Feb-15	192	137	0.3	58	0	138	0.2	11	108	69	<0.25	1.3	5	<0.5	<0.05	<2	<0.25	51	4	20	
Mar-15	177	117	0.3	52	0	136	0.2	11	100	67	0.35	1.0	6	<0.5	<0.05	<2	<0.25	54	6	22	
Apr-15	197	131	0.2	59	0	137	0.2	12	112	80	<0.25	1.7	8	<0.5	<0.05	<2	<0.25	52	5	23	
May-15	186	146	0.2	58	0	134	0.2	10	103	73	<0.25	1.4	8	<0.5	<0.05	<2	<0.25	56	6	25	
Jun-15	185	132	0.2	56	0	138	0.2	11	102	87	0.83	1.2	8	<0.5	<0.05	<2	<0.25	52	6	28	
Jul-15																					
Aug-15																					
Sep-15	204	135	0.3	61	0	148	0.1	12	110	64	<0.25	0.7	8	<0.5	<0.05	<2	<0.25	56	8	35	
Oct-15	184	133	0.2	55	0	129	0.1	11	101	64	<0.25	<0.5	6	<0.5	<0.05	<2	<0.25	45	3	20	0.000
Nov-15	210	145	0.2	65	0	132	0.2	12	102	73	<0.25	0.7	9	<0.5	<0.05	<2	<0.25	64	12	36	0.000
Dec-15	196	138	0.2	57	0	140	0.2	13	104	63	<0.25	0.6	9	<0.5	<0.05	<2	<0.25	49	8	27	0.660
Avg	190	134	0.2	57	0	137	0.2	11	104	71	<0.32	1.0	7	<0.5	<0.05	<2	<0.25	52	7	26	0.220
Min	173	117	0.2	51	0	129	0.1	10	96	63	<0.25	<0.5	5	<0.5	<0.05	<2	<0.25	45	3	20	0.000
Max	210	146	0.3	65	0	148	0.2	13	112	87	0.83	1.7	9	<0.5	<0.05	<2	<0.25	64	12	36	0.660

CCWRF (M-004) Effluent Monthly Inorganic Data — Table No. 8d

	Total Hardness	HCO_3^{2-}	B	Ca	CO_3^{2-}	Cl	F	Mg	Na	SO_4	Cd, TR	Cr, Total	Cu, TR	Pb, TR	Hg, TR	Se, TR	Ag, TR	Zn, TR	Chlorodi-bromomethane	Bromodi-chloromethane	2,3,7,8-TCDD
Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pg/L
Limits																			34 mo avg; 68 max daily	46 mo avg; 67 max daily	
Jan-15	168	138	0.2	50	0	131	0.3	11	101	74	<0.25	0.5	7	<0.5	<0.05	<2	<0.25	49	25	37	
Feb-15	181	138	0.3	55	0	142	0.2	11	115	75	<0.25	1.3	5	<0.5	<0.05	<2	<0.25	51			
Mar-15	176	137	0.3	53	0	135	0.2	10	105	68	<0.25	1.1	5	<0.5	<0.05	<2	<0.25	55			
Apr-15	187	149	0.3	57	0	145	0.2	11	107	75	<0.25	1.8	8	<0.5	<0.05	<2	<0.25	71	18	37	
May-15	172	136	0.2	52	0	133	0.3	10	112	100	<0.25	1.3	7	<0.5	<0.05	<2	<0.25	57			
Jun-15	178	150	0.2	55	0	130	0.2	10	103	80	<0.25	1.5	8	<0.5	<0.05	<2	<0.25	61			
Jul-15	182	133	0.2	55	0	135	0.2	11	113	96	<0.25	1.0	7	<0.5	<0.05	<2	<0.25	66	11	27	
Aug-15	181	140	0.3	55	0	137	0.2	11	125	96	<0.25	0.8	7	<0.5	<0.05	<2	<0.25	53			
Sep-15	180	121	0.3	54	0	150	0.2	11	117	96	<0.25	0.8	7	<0.5	<0.05	<2	<0.25	59			
Oct-15	176	124	0.2	53	0	146	0.2	11	118	87	<0.25	0.9	8	<0.5	<0.05	<2	<0.25	65	26	43	0.000
Nov-15	195	122	0.2	58	0	137	0.2	12	121	100	<0.25	0.8	8	<0.5	<0.05	<2	<0.25	61	23	38	
Dec-15	175	128	0.3	52	0	152	0.2	11	126	100	<0.25	0.8	8	<0.5	<0.05	<2	<0.25	68	23	40	
Avg	179	135	0.3	54	0	139	0.2	11	114	87	<0.25	1.1	7	<0.5	<0.05	<2	<0.25	60	21	37	0.000
Min	168	121	0.2	50	0	130	0.2	10	101	68	<0.25	0.5	5	<0.5	<0.05	<2	<0.25	49	11	27	0.000
Max	195	150	0.3	58	0	152	0.3	12	126	100	<0.25	1.8	8	<0.5	<0.05	<2	<0.25	71	26	43	0.000

*Free Cyanide is analyzed using ASTM-D7237 for analysis of aquatic free cyanide in accordance with R8-2015-0036

RP-1 (M-001B) Effluent Quarterly Data — Table No. 9a

Date	Al, TR µg/L	Sb, TR µg/L	As, TR µg/L	Ba, TR µg/L	Co, TR µg/L	Ni, TR µg/L
Jan-15	35	<1	<2	15	<1	2
Feb-15	36	<1	<2	11	<1	3
Mar-15	33	<1	<2	12	<1	2
Apr-15	<25	<1	<2	19	<1	4
May-15	26	0.8	<2	15	<1	2
Jun-15	38	0.8	<2	12	<1	2
Jul-15	40	0.9	<2	15	<1	3
Aug-15	35	0.8	<2	13	<1	2
Sep-15	40	0.9	<2	16	<1	3
Oct-15	35	0.8	<2	14	<1	3
Nov-15	47	0.8	<2	15	<1	3
Dec-15	35	0.8	<2	14	<1	2
Avg	35	1	<2	14	<1	3
Min	<25	1	<2	11	<1	2
Max	47	<1	<2	19	<1	4

RP-1/RP-4 (M-002A) Effluent Quarterly Data — Table No. 9b

Al, TR µg/L	Sb, TR µg/L	As, TR µg/L	Ba, TR µg/L	Co, TR µg/L	Ni, TR µg/L
35	<1	<2	14	<1	2
35	<1	<2	11	<1	2
32	<1	<2	12	<1	2
<25	<1	<2	18	<1	3
<25	0.8	<2	15	<1	2
44	0.8	<2	12	<1	2
35	0.9	<2	16	<1	3
32	0.7	<2	13	<1	3
34	0.9	<2	16	<1	3
41	0.8	<2	14	<1	3
47	0.7	<2	15	<1	3
33	0.8	<2	15	<1	2
35	0.9	<2	14	<1	3
<25	0.7	<2	11	<1	2
47	<1.0	<2	18	<1	3

RP-5 (M-003) Effluent Quarterly Data — Table No. 9c

Date	Al, TR µg/L	Sb, TR µg/L	As, TR µg/L	Ba, TR µg/L	Co, TR µg/L	Ni, TR µg/L
Jan-15	<25	<1	<2	17	<1	3
Feb-15	<25	<1	<2	32	<1	2
Mar-15	<25	<1	<2	22	<1	2
Apr-15	<25	<1	<2	33	<1	3
May-15	<25	0.5	<2	42	<1	3
Jun-15	<25	0.5	2	29	<1	3
Jul-15						
Aug-15						
Sep-15	<25	<0.5	<2	38	<1	3
Oct-15	<25	<0.5	<2	25	<1	3
Nov-15	<25	0.6	<2	37	<1	3
Dec-15	<25	<0.5	<2	37	<1	2
Avg	<25	<1	<2	31	<1	3
Min	<25	<1	<2	17	<1	2
Max	<25	<1	2	42	<1	3

CCWRF (M-004) Effluent Quarterly Data — Table No. 9d

Al, TR µg/L	Sb, TR µg/L	As, TR µg/L	Ba, TR µg/L	Co, TR µg/L	Ni, TR µg/L
<25	<1	<2	13	<1	2
50	<1	<2	16	<1	2
75	<1	<2	18	<1	2
86	<1	2	23	<1	4
65	0.5	<2	26	<1	2
64	0.6	2	21	<1	2
72	0.6	2	23	<1	3
<25	<0.5	<2	22	<1	2
54	0.6	<2	24	<1	3
45	0.5	<2	22	<1	3
50	0.6	3	16	<1	3
73	0.5	<2	22	<1	2
57	1	<2	21	<1	3
<25	<1	<2	13	<1	2
86	<1	3	26	<1	4

Table No. 10

	Discharged Eff Flow			TIN						Agency-wide TIN				
	RP1/RP4	RP5	CC	RP1/RP4		RP5		CC		Discharge		Limit		12-MRA
Mo-Yr										flow wt.	total	flow wt.	total	flow-wt.
		MGD		mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L
Jan-15	20.0	9.8	6.8	9.1	1,510	7.9	650	4.4	250	7.9	2,410	8	5,338	5.2
Feb-15	13.1	9.9	2.4	6.9	750	8.9	730	3.9	80	7.4	1,560	8	5,338	5.3
Mar-15	14.8	4.5	1.9	6.2	770	7.0	260	3.8	60	6.2	1,090	8	5,338	5.4
Apr-15	13.8	2.7	1.3	5.0	570	6.8	150	3.6	40	5.2	760	8	5,338	5.4
May-15	12.6	3.9	3.2	7.1	750	5.1	170	3.5	90	6.1	1,010	8	5,338	5.4
Jun-15	5.8	0.7	1.8	4.6	220	6.4	40	3.7	60	4.6	320	8	5,338	5.4
Jul-15	6.3	0.0	1.8	5.8	310	6.3	0	3.0	40	5.2	350	8	5,338	5.6
Aug-15	3.1	0.0	1.6	5.3	130	6.5	0	3.6	50	4.7	180	8	5,338	5.7
Sep-15	10.8	1.1	2.2	4.8	430	6.8	60	3.9	70	4.8	560	8	5,338	5.7
Oct-15	12.8	2.9	2.4	4.7	510	6.8	170	5.6	110	5.2	790	8	5,338	5.8
Nov-15	20.3	2.8	3.6	5.2	890	6.4	150	5.6	170	5.4	1,210	8	5,338	5.7
Dec-15	18.1	3.4	4.0	6.2	940	7.3	210	5.1	170	6.2	1,320	8	5,338	5.7
Avg	**12.6**	**3.5**	**2.8**	**5.9**	**650**	**6.8**	**220**	**4.1**	**100**	**5.7**	**960**	**8**	**5,338**	**5.5**
Min	**3.1**	**0.0**	**1.3**	**4.6**	**130**	**5.1**	**0**	**3.0**	**40**	**4.6**	**180**	**8**	**5,338**	**5.2**
Max	**20.3**	**9.9**	**6.8**	**9.1**	**1,510**	**8.9**	**730**	**5.6**	**250**	**7.9**	**2,410**	**8**	**5,338**	**5.8**

Agency-wide TDS 12-Month Running Averages

Table No. 11

	Flows								Total Dissolved Solids (TDS)								Agency-wide TDS				
	001 [1]	RP-1 RW	002	RP-4 RW	RP-5	RP-5 RW	CC	CC RW	001	RP-1 RW [2]	002	RP-4 RW	RP-5	RP-5 RW [2]	CC	CC RW [2]	Discharge		Limit		12-MRA
Mo-Yr	MGD								mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	flow wt. mg/L	total lbs/day	flow wt. mg/L	total lbs/day	flow wt. mg/L
Jan-15	2.3	9.2	17.8	5.5	9.8	0.3	6.8	0.1	584	532	552	495	555	527	568	556	546	267,120	550	366,960	525
Feb-15	2.6	14.9	10.4	7.4	9.9	0.4	2.4	3.5	571	559	576	498	573	546	611	574	560	235,860	550	366,960	529
Mar-15	1.9	15.0	12.9	10.1	4.5	3.0	1.9	2.6	548	529	542	482	562	518	578	540	528	225,870	550	366,960	532
Apr-15	2.3	15.4	11.4	10.6	2.7	3.7	1.3	2.8	566	517	538	497	585	558	588	560	531	214,470	550	366,960	533
May-15	2.0	14.8	10.6	9.2	3.9	3.6	3.2	2.4	541	506	532	498	550	519	562	527	520	218,990	550	366,960	533
Jun-15	3.0	19.1	2.8	10.6	0.7	4.9	1.8	4.1	558	504	518	488	596	536	561	549	515	191,800	550	366,960	534
Jul-15	2.7	20.3	3.6	9.6	0.0	5.2	1.8	4.9	529	477	507	487	NA	521	571	551	500	185,940	550	366,960	534
Aug-15	1.9	21.2	1.2	10.7	0.0	6.0	1.6	5.1	533	487	523	463	NA	530	598	573	503	182,830	550	366,960	534
Sep-15	3.3	16.5	7.5	9.7	1.1	3.7	2.2	4.3	538	495	501	473	555	511	598	572	508	194,000	550	366,960	532
Oct-15	1.8	13.8	11.0	8.6	2.9	4.1	2.4	4.2	526	482	503	466	548	526	586	570	506	198,020	550	366,960	529
Nov-15	3.0	10.0	17.3	7.8	2.8	2.8	3.6	3.4	526	476	496	476	547	526	579	555	505	214,540	550	366,960	524
Dec-15	3.3	13.3	14.8	7.0	3.4	1.9	4.0	2.8	518	484	491	458	528	520	599	568	503	217,570	550	366,960	519
Avg	**2.5**	**15.3**	**10.1**	**8.9**	**3.5**	**3.3**	**2.8**	**3.4**	**545**	**504**	**523**	**482**	**560**	**528**	**583**	**558**	**519**	**212,250**	**550**	**366,960**	**530**
Min	**1.8**	**9.2**	**1.2**	**5.5**	**0.0**	**0.3**	**1.3**	**0.1**	**518**	**476**	**491**	**458**	**528**	**511**	**561**	**527**	**500**	**182,830**	**550**	**366,960**	**519**
Max	**3.3**	**21.2**	**17.8**	**10.7**	**9.9**	**6.0**	**6.8**	**5.1**	**584**	**559**	**576**	**498**	**596**	**558**	**611**	**574**	**560**	**267,120**	**550**	**366,960**	**534**

NOTES: [1] Prior to April 2010, 001 effluent flow included recycled water flow.

[2] Flow and TDS added to flow-weight for RP-1, RP-5, and CCWRF recycled water (May 2010)

NA: Not Analyzed, due to no discharge

APPENDIX B

RECYCLED WATER

COMPLIANCE DATA

FOR CALENDAR YEAR 2015

INLAND EMPIRE UTILITIES AGENCY

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RP-1 (M-001B) Effluent Remaining Priority Pollutants

Table 18a

RP-1 (M-001B) Effluent Remaining Priority Pollutant Metals & CN, µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
Antimony (Sb)	<0.5	<0.5	<0.5	<0.5	0.8	0.8	0.9	0.8	0.9	0.8	0.8	0.8	0.9
Arsenic (As)	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Beryllium (Be)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cadmium (Cd)	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Chromium (Cr)	<0.5	1.1	0.9	1.7	1.1	1.5	0.7	<0.5	0.5	<0.5	<0.5	<0.5	1.7
Copper (Cu)	3.8	3.7	3.4	4.7	4.1	3.6	3.4	3.4	3.7	3.5	3.9	3.9	4.7
Lead (Pb)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Mercury (Hg)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Nickel (Ni)	2.3	2.5	1.8	3.9	2.4	2.5	2.5	2.4	2.7	2.6	2.7	2.1	3.9
Selenium (Se)	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Silver (Ag)	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Thallium (Tl)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Zinc (Zn)	24	31	27	24	27	24	28	27	25	21	29	25	31
CN, Aquatic Free	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2			<2

RP-1 (M-001B) Effluent Volatile Organics (EPA Methods 624, 601/602), µg/L

1,1,1-Trichloroethane										<1			<1
1,1,2,2-Tetrachloroethane										<0.5			<0.5
1,1,2-Trichloroethane										<1			<1
1,1-Dichloroethane										<0.5			<0.5
1,1-Dichloroethene										<1			<1
1,2-Dichlorobenzene										<1			<1
1,2-Dichloroethane										<1			<1
1,2-Dichloropropane										<0.5			<0.5
1,3-Dichlorobenzene										<1			<1
1,4-Dichlorobenzene										<1			<1
2-Chloroethyl vinyl ether										<1			<1
Benzene										<1			<1
Bromodichloromethane	19	20		23			21			19			23
Bromoform	<1	<1		<1			<1			<1			<1
Bromomethane										<1			<1
Carbon tetrachloride										<1			<1
Chlorobenzene										<1			<1
Chloroethane										<1			<1
Chloroform	56	52		61			79			74			79
Chloromethane										<1			<1
cis-1,3-Dichloropropene										<1			<1
Dibromochloromethane	4	5		5			4			3			5
Ethylbenzene										<1			<1
Methylene chloride										<1			<1
Tetrachloroethene										<1			<1
Toluene										<1			<1
trans-1,2-Dichloroethene										<0.5			<0.5
trans-1,3-Dichloropropene										<1			<1
Trichloroethene										<1			<1
Trichlorofluoromethane										<2			<2
Vinyl chloride										<1			<1
Acrolein										<2			<2
Acrylonitrile										<2			<2

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RP-1 (M-001B) Effluent Remaining Priority Pollutants

Table 18b

RP-1 (M-001B) Effluent Base/Neutral and Acid Extractibles (EPA Method 625), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
1,2,4-Trichlorobenzene										<1			<1
1,2-Dichlorobenzene										<1			<1
1,3-Dichlorobenzene										<1			<1
1,4-Dichlorobenzene										<1			<1
2,4,6-Trichlorophenol										<1			<1
2,4-Dichlorophenol										<2			<2
2,4-Dimethylphenol										<1			<1
2,4-Dinitrophenol										<3			<3
2,4-Dinitrotoluene										<1			<1
2,6-Dinitrotoluene										<2			<2
2-Chloronaphthalene										<1			<1
2-Chlorophenol										<1			<1
2-Methyl-4,6-dinitrophenol										<2			<2
2-Nitrophenol										<1			<1
3,3-Dichlorobenzidine										<5			<5
4-Bromophenyl phenyl ether										<1			<1
4-Chloro-3-methylphenol										<1			<1
4-Chlorophenyl phenyl ether										<1			<1
4-Nitrophenol										<3			<3
Acenaphthene										<1			<1
Acenaphthylene										<1			<1
Anthracene										<1			<1
Azobenzene										<1			<1
Benzidine										<5			<5
Benzo(a)anthracene										<5			<5
Benzo(a)pyrene										<1			<1
Benzo(b)fluoranthene										<1			<1
Benzo(g,h,i)perylene										<2			<2
Benzo(k)fluoranthene										<1			<1
Bis(2-chloroethoxy)methane										<2			<2
Bis(2-chloroethyl)ether										<1			<1
Bis(2-chloroisopropyl)ether										<1			<1
Bis(2-ethylhexyl)phthalate	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2			<2
Butyl benzyl phthalate										<1			<1
Chrysene										<1			<1
Dibenzo(a,h)anthracene										<1			<1
Diethyl phthalate										<2			<2
Dimethyl phthalate										<1			<1
Di-n-butyl phthalate										<1			<1
Di-n-octyl phthalate										<1			<1
Fluoranthene										<1			<1
Fluorene										<1			<1
Hexachlorobenzene										<1			<1
Hexachlorobutadiene										<1			<1
Hexachlorocyclopentadiene										<5			<5
Hexachloroethane										<1			<1
Indeno(1,2,3-cd)pyrene										<2			<2
Isophorone										<1			<1
Naphthalene										<1			<1
Nitrobenzene										<1			<1
N-Nitrosodimethylamine										<1			<1
N-Nitroso-di-n-propylamine										<1			<1
N-Nitrosodiphenylamine										<1			<1
Pentachlorophenol										<2			<2
Phenanthrene										<1			<1
Phenol										<1			<1
Pyrene										<1			<1

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RP-1 (M-001B) Effluent Remaining Priority Pollutants

Table 18c

RP-1 (M-001B) Effluent Pesticides (EPA Method 608), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
4,4-DDD										<0.006			<0.006
4,4-DDE										<0.006			<0.006
4,4-DDT										<0.008			<0.008
Aldrin										<0.004			<0.004
Alpha-BHC										<0.008			<0.008
Beta-BHC										<0.005			<0.005
Delta-BHC										<0.007			<0.007
Dieldrin										<0.006			<0.006
Endosulfan I										<0.01			<0.01
Endosulfan II										<0.007			<0.007
Endosulfan Sulfate										<0.009			<0.009
Endrin										<0.009			<0.009
Endrin aldehyde										<0.006			<0.006
Gamma-BHC										<0.01			<0.01
Heptachlor										<0.006			<0.006
Heptachlor epoxide										<0.007			<0.007
Chlordane										<0.1			<0.1
PCB-1016										<0.5			<0.5
PCB-1221										<0.5			<0.5
PCB-1232										<0.5			<0.5
PCB-1242										<0.5			<0.5
PCB-1248										<0.5			<0.5
PCB-1254										<0.5			<0.5
PCB-1260										<0.5			<0.5
Toxaphene										<0.5			<0.5
RP-1 (M-001B) Effluent Dioxins & Furans, pg/L (reported values based on detection limit)													
PCDD/PCDF Congeners*										0.0			0.0

*TEQ is calculated based on congener concentrations below the reporting limit (RL) set to zero

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RP-1/RP-4 (M-002A) Effluent Remaining Priority Pollutants

Table 19a

RP-1/RP-4 (M-002A) Effluent Remaining Priority Pollutant Metals & CN, µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
Antimony (Sb)	<0.5	<0.5	<0.5	<0.5	0.8	0.8	0.9	0.7	0.9	0.8	0.7	0.8	0.9
Arsenic (As)	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Beryllium (Be)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cadmium (Cd)	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Chromium (Cr)	<0.5	1.1	0.7	1.4	1.0	0.9	1.1	0.6	0.7	<0.5	<0.5	<0.5	1.4
Copper (Cu)	3.7	3.8	3.7	4.6	4.2	4.0	3.7	3.6	4.1	3.7	4.0	3.8	4.6
Lead (Pb)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Mercury (Hg)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Nickel (Ni)	2.3	2.5	1.8	2.6	2.4	2.5	2.7	2.6	2.9	2.6	2.7	2.3	2.9
Selenium (Se)	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Silver (Ag)	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Thallium (Tl)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Zinc (Zn)	23	32	28	24	26	24	29	27	24	21	27	23	32
CN, Aquatic Free	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2			<2

RP-1/RP-4 (M-002A) Effluent Volatile Organics (EPA Methods 624, 601/602), µg/L

1,1,1-Trichloroethane										<1			<1
1,1,2,2-Tetrachloroethane										<0.5			<0.5
1,1,2-Trichloroethane										<1			<1
1,1-Dichloroethane										<0.5			<0.5
1,1-Dichloroethene										<1			<1
1,2-Dichlorobenzene										<1			<1
1,2-Dichloroethane										<1			<1
1,2-Dichloropropane										<0.5			<0.5
1,3-Dichlorobenzene										<1			<1
1,4-Dichlorobenzene										<1			<1
2-Chloroethyl vinyl ether										<1			<1
Benzene										<1			<1
Bromodichloromethane	18			19			13			18			19
Bromoform	<1			<1			<1			<1			<1
Bromomethane										<1			<1
Carbon tetrachloride										<1			<1
Chlorobenzene										<1			<1
Chloroethane										<1			<1
Chloroform	68			59			57			76			76
Chloromethane										<1			<1
cis-1,3-Dichloropropene										<1			<1
Dibromochloromethane	4			5			2			3			5
Ethylbenzene										<1			<1
Methylene chloride										<1			<1
Tetrachloroethene										<1			<1
Toluene										<1			<1
trans-1,2-Dichloroethene										<0.5			<0.5
trans-1,3-Dichloropropene										<1			<1
Trichloroethene										<1			<1
Trichlorofluoromethane										<2			<2
Vinyl chloride										<1			<1
Acrolein										<2			<2
Acrylonitrile										<2			<2

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RP-1/RP-4 (M-002A) Effluent Remaining Priority Pollutants

Table 19b

RP-1/RP-4 (M-002A) Effluent Base/Neutral and Acid Extractibles (EPA Method 625), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
1,2,4-Trichlorobenzene										<1			<1
1,2-Dichlorobenzene										<1			<1
1,3-Dichlorobenzene										<1			<1
1,4-Dichlorobenzene										<1			<1
2,4,6-Trichlorophenol										<1			<1
2,4-Dichlorophenol										<2			<2
2,4-Dimethylphenol										<1			<1
2,4-Dinitrophenol										<3			<3
2,4-Dinitrotoluene										<1			<1
2,6-Dinitrotoluene										<2			<2
2-Chloronaphthalene										<1			<1
2-Chlorophenol										<1			<1
2-Methyl-4,6-dinitrophenol										<2			<2
2-Nitrophenol										<1			<1
3,3-Dichlorobenzidine										<5			<5
4-Bromophenyl phenyl ether										<1			<1
4-Chloro-3-methylphenol										<1			<1
4-Chlorophenyl phenyl ether										<1			<1
4-Nitrophenol										<3			<3
Acenaphthene										<1			<1
Acenaphthylene										<1			<1
Anthracene										<1			<1
Azobenzene										<1			<1
Benzidine										<5			<5
Benzo(a)anthracene										<5			<5
Benzo(a)pyrene										<1			<1
Benzo(b)fluoranthene										<1			<1
Benzo(g,h,i)perylene										<2			<2
Benzo(k)fluoranthene										<1			<1
Bis(2-chloroethoxy)methane										<2			<2
Bis(2-chloroethyl)ether										<1			<1
Bis(2-chloroisopropyl)ether										<1			<1
Bis(2-ethylhexyl)phthalate	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2			<2
Butyl benzyl phthalate										<1			<1
Chrysene										<1			<1
Dibenzo(a,h)anthracene										<1			<1
Diethyl phthalate										<2			<2
Dimethyl phthalate										<1			<1
Di-n-butyl phthalate										<1			<1
Di-n-octyl phthalate										<1			<1
Fluoranthene										<1			<1
Fluorene										<1			<1
Hexachlorobenzene										<1			<1
Hexachlorobutadiene										<1			<1
Hexachlorocyclopentadiene										<5			<5
Hexachloroethane										<1			<1
Indeno(1,2,3-cd)pyrene										<2			<2
Isophorone										<1			<1
Naphthalene										<1			<1
Nitrobenzene										<1			<1
N-Nitrosodimethylamine										<1			<1
N-Nitroso-di-n-propylamine										<1			<1
N-Nitrosodiphenylamine										<1			<1
Pentachlorophenol										<2			<2
Phenanthrene										<1			<1
Phenol										<1			<1
Pyrene										<1			<1

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RP-1/RP-4 (M-002A) Effluent Remaining Priority Pollutants

Table 19c

RP-1/RP-4 (M-002A) Effluent Pesticides (EPA Method 608), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
4,4-DDD										<0.006			<0.006
4,4-DDE										<0.006			<0.006
4,4-DDT										<0.008			<0.008
Aldrin										<0.004			<0.004
Alpha-BHC										<0.008			<0.008
Beta-BHC										<0.005			<0.005
Delta-BHC										<0.007			<0.007
Dieldrin										<0.006			<0.006
Endosulfan I										<0.01			<0.01
Endosulfan II										<0.007			<0.007
Endosulfan Sulfate										<0.009			<0.009
Endrin										<0.009			<0.009
Endrin aldehyde										<0.006			<0.006
Gamma-BHC										<0.01			<0.01
Heptachlor										<0.006			<0.006
Heptachlor epoxide										<0.007			<0.007
Chlordane										<0.1			<0.1
PCB-1016										<0.5			<0.5
PCB-1221										<0.5			<0.5
PCB-1232										<0.5			<0.5
PCB-1242										<0.5			<0.5
PCB-1248										<0.5			<0.5
PCB-1254										<0.5			<0.5
PCB-1260										<0.5			<0.5
Toxaphene										<0.5			<0.5
RP-1/RP-4 (M-002A) Effluent Dioxins & Furans, pg/L (reported values based on detection limit)													
PCDD/PCDF Congeners*										0.0			0.00

*TEQ is calculated based on congener concentrations below the reporting limit (RL) set to zero

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RP-5 (M-003) Effluent Remaining Priority Pollutants

Table 20a

RP-5 (M-003) Effluent Remaining Priority Pollutant Metals & CN, µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
Antimony (Sb)	<0.5	<0.5	<0.5	<0.5	0.5	0.5			<0.5	<0.5	0.6	<0.5	0.6
Arsenic (As)	<2	<2	<2	<2	<2	2			<2	<2	<2	<2	2
Beryllium (Be)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5
Cadmium (Cd)	<0.25	<0.25	0.35	<0.25	<0.25	0.83			<0.25	<0.25	<0.25	<0.25	0.83
Chromium (Cr)	<0.5	1.3	1.0	1.7	1.4	1.2			0.7	<0.5	0.7	0.6	1.7
Copper (Cu)	6.0	5.1	6.3	8.1	8.0	7.5			8.2	6.2	8.5	9.2	9.2
Lead (Pb)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5
Mercury (Hg)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05			<0.05	<0.05	<0.05	<0.05	<0.05
Nickel (Ni)	2.5	2.5	1.9	3.3	2.9	3.0			2.6	2.7	3.0	2.5	3.3
Selenium (Se)	<2	<2	<2	<2	<2	<2			<2	<2	<2	<2	<2
Silver (Ag)	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25			<0.25	<0.25	<0.25	<0.25	<0.25
Thallium (Tl)	<1	<1	<1	<1	<1	<1			<1	<1	<1	<1	<1
Zinc (Zn)	45	51	54	52	56	52			56	45	64	49	64
CN, Aquatic Free	<2	<2	<2	<2	<2	<2			<2	<2			<2

RP-5 (M-003) Effluent Volatile Organics (EPA Methods 624, 601/602), µg/L

1,1,1-Trichloroethane										<1			<1
1,1,2,2-Tetrachloroethane										<0.5			<0.5
1,1,2-Trichloroethane										<1			<1
1,1-Dichloroethane										<0.5			<0.5
1,1-Dichloroethene										<1			<1
1,2-Dichlorobenzene										<1			<1
1,2-Dichloroethane										<1			<1
1,2-Dichloropropane										<0.5			<0.5
1,3-Dichlorobenzene										<1			<1
1,4-Dichlorobenzene										<1			<1
2-Chloroethyl vinyl ether										<1			<1
Benzene										<1			<1
Bromodichloromethane	28	20	22	23	25	28			35	20	36	27	36
Bromoform	<1	<1	<1	<1	<1	<1			<1	<1	<1	<1	<1
Bromomethane										<1			<1
Carbon tetrachloride										<1			<1
Chlorobenzene										<1			<1
Chloroethane										<1			<1
Chloroform	47	66	53	63	65	73			84	81	57	61	84
Chloromethane										<1			<1
cis-1,3-Dichloropropene										<1			<1
Dibromochloromethane	12	4	6	5	6	6			8	3	12	8	12
Ethylbenzene										<1			<1
Methylene chloride										<1			<1
Tetrachloroethene										<1			<1
Toluene										<1			<1
trans-1,2-Dichloroethene										<0.5			<0.5
trans-1,3-Dichloropropene										<1			<1
Trichloroethene										<1			<1
Trichlorofluoromethane										<2			<2
Vinyl chloride										<1			<1
Acrolein										<2			<2
Acrylonitrile										<2			<2

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RP-5 (M-003) Effluent Remaining Priority Pollutants

Table 20b

RP-5 (M-003) Effluent Base/Neutral and Acid Extractibles (EPA Method 625), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
1,2,4-Trichlorobenzene										<1			<1
1,2-Dichlorobenzene										<1			<1
1,3-Dichlorobenzene										<1			<1
1,4-Dichlorobenzene										<1			<1
2,4,6-Trichlorophenol										<1			<1
2,4-Dichlorophenol										<2			<2
2,4-Dimethylphenol										<1			<1
2,4-Dinitrophenol										<3			<3
2,4-Dinitrotoluene										<1			<1
2,6-Dinitrotoluene										<2			<2
2-Chloronaphthalene										<1			<1
2-Chlorophenol										<1			<1
2-Methyl-4,6-dinitrophenol										<2			<2
2-Nitrophenol										<1			<1
3,3-Dichlorobenzidine										<5			<5
4-Bromophenyl phenyl ether										<1			<1
4-Chloro-3-methylphenol										<1			<1
4-Chlorophenyl phenyl ether										<1			<1
4-Nitrophenol										<3			<3
Acenaphthene										<1			<1
Acenaphthylene										<1			<1
Anthracene										<1			<1
Azobenzene										<1			<1
Benzidine										<5			<5
Benzo(a)anthracene										<5			<5
Benzo(a)pyrene										<1			<1
Benzo(b)fluoranthene										<1			<1
Benzo(g,h,i)perylene										<2			<2
Benzo(k)fluoranthene										<1			<1
Bis(2-chloroethoxy)methane										<2			<2
Bis(2-chloroethyl)ether										<1			<1
Bis(2-chloroisopropyl)ether										<1			<1
Bis(2-ethylhexyl)phthalate	<2	<2	<2	<2	<2	<2			<2	<2			<2
Butyl benzyl phthalate										<1			<1
Chrysene										<1			<1
Dibenzo(a,h)anthracene										<1			<1
Diethyl phthalate										<2			<2
Dimethyl phthalate										<1			<1
Di-n-butyl phthalate										<1			<1
Di-n-octyl phthalate										<1			<1
Fluoranthene										<1			<1
Fluorene										<1			<1
Hexachlorobenzene										<1			<1
Hexachlorobutadiene										<1			<1
Hexachlorocyclopentadiene										<5			<5
Hexachloroethane										<1			<1
Indeno(1,2,3-cd)pyrene										<2			<2
Isophorone										<1			<1
Naphthalene										<1			<1
Nitrobenzene										<1			<1
N-Nitrosodimethylamine										<1			<1
N-Nitroso-di-n-propylamine										<1			<1
N-Nitrosodiphenylamine										<1			<1
Pentachlorophenol										<2			<2
Phenanthrene										<1			<1
Phenol										<1			<1
Pyrene										<1			<1

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RP-5 (M-003) Effluent Remaining Priority Pollutants

Table 20c

RP-5 (M-003) Effluent Pesticides (EPA Method 608), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
4,4-DDD										<0.006			<0.006
4,4-DDE										<0.006			<0.006
4,4-DDT										<0.008			<0.008
Aldrin										<0.004			<0.004
Alpha-BHC										<0.008			<0.008
Beta-BHC										<0.005			<0.005
Delta-BHC										<0.007			<0.007
Dieldrin										<0.006			<0.006
Endosulfan I										<0.01			<0.01
Endosulfan II										<0.007			<0.007
Endosulfan Sulfate										<0.009			<0.009
Endrin										<0.009			<0.009
Endrin aldehyde										<0.006			<0.006
Gamma-BHC										<0.01			<0.01
Heptachlor										<0.006			<0.006
Heptachlor epoxide										<0.007			<0.007
Chlordane										<0.1			<0.1
PCB-1016										<0.5			<0.5
PCB-1221										<0.5			<0.5
PCB-1232										<0.5			<0.5
PCB-1242										<0.5			<0.5
PCB-1248										<0.5			<0.5
PCB-1254										<0.5			<0.5
PCB-1260										<0.5			<0.5
Toxaphene										<0.5			<0.5
RP-5 (M-003) Effluent Dioxins & Furans, pg/L (reported values based on detection limit)													
PCDD/PCDF Congeners*	<5**									0.0	0.0	0.660	<5

*TEQ is calculated based on congener concentrations below the reporting limit (RL) set to zero

**Single compound only, 2,3,7,8-TCDD

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CCWRF (M-004) Effluent Remaining Priority Pollutants

Table 21a

CCWRF (M-004) Effluent Remaining Priority Pollutant Metals & CN, µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
Antimony (Sb)	<0.5	<0.5	<0.5	<0.5	0.5	0.6	0.6	<0.5	0.6	0.5	0.6	0.5	0.6
Arsenic (As)	<2	<2	<2	3	<2	2	2	<2	<2	<2	3	<2	3
Beryllium (Be)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cadmium (Cd)	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Chromium (Cr)	0.5	1.3	1.1	1.8	1.3	1.5	1.0	0.8	0.8	0.9	0.8	0.8	1.8
Copper (Cu)	6.9	5.3	5.0	8.0	6.8	7.7	7.0	6.6	6.9	7.9	8.4	7.9	8.4
Lead (Pb)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Mercury (Hg)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Nickel (Ni)	2.3	2.2	1.7	3.5	2.5	2.4	2.6	2.2	2.6	2.8	2.9	2.3	3.5
Selenium (Se)	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Silver (Ag)	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Thallium (Tl)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Zinc (Zn)	49	51	55	71	57	61	66	53	59	65	61	68	71
CN, Aquatic Free	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2			<2

CCWRF (M-004) Effluent Volatile Organics (EPA Methods 624, 601/602), µg/L

1,1,1-Trichloroethane										<1			<1
1,1,2,2-Tetrachloroethane										<0.5			<0.5
1,1,2-Trichloroethane										<1			<1
1,1-Dichloroethane										<0.5			<0.5
1,1-Dichloroethene										<1			<1
1,2-Dichlorobenzene										<1			<1
1,2-Dichloroethane										<1			<1
1,2-Dichloropropane										<0.5			<0.5
1,3-Dichlorobenzene										<1			<1
1,4-Dichlorobenzene										<1			<1
2-Chloroethyl vinyl ether										<1			<1
Benzene										<1			<1
Bromodichloromethane	37			37			27			43	38	40	43
Bromoform	3			2			<1			3	3	2	3
Bromomethane										<1			<1
Carbon tetrachloride										<1			<1
Chlorobenzene										<1			<1
Chloroethane										<1			<1
Chloroform	38			55			45			49	40	43	55
Chloromethane										<1			<1
cis-1,3-Dichloropropene										<1			<1
Dibromochloromethane	25			18			11			26	23	23	26
Ethylbenzene										<1			<1
Methylene chloride										<1			<1
Tetrachloroethene										<1			<1
Toluene										<1			<1
trans-1,2-Dichloroethene										<0.5			<0.5
trans-1,3-Dichloropropene										<1			<1
Trichloroethene										<1			<1
Trichlorofluoromethane										<2			<2
Vinyl chloride										<1			<1
Acrolein										<2			<2
Acrylonitrile										<2			<2

INLAND EMPIRE UTILITIES AGENCY

Regional Plant Nos. 1, 4, 5, & Carbon Canyon Water Recycling Facility, 2015 NPDES Annual Report

CCWRF (M-004) Effluent Remaining Priority Pollutants

Table 21b

CCWRF (M-004) Effluent Base/Neutral and Acid Extractibles (EPA Method 625), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
1,2,4-Trichlorobenzene										<1			<1
1,2-Dichlorobenzene										<1			<1
1,3-Dichlorobenzene										<1			<1
1,4-Dichlorobenzene										<1			<1
2,4,6-Trichlorophenol										<1			<1
2,4-Dichlorophenol										<2			<2
2,4-Dimethylphenol										<1			<1
2,4-Dinitrophenol										<3			<3
2,4-Dinitrotoluene										<1			<1
2,6-Dinitrotoluene										<2			<2
2-Chloronaphthalene										<1			<1
2-Chlorophenol										<1			<1
2-Methyl-4,6-dinitrophenol										<2			<2
2-Nitrophenol										<1			<1
3,3-Dichlorobenzidine										<5			<5
4-Bromophenyl phenyl ether										<1			<1
4-Chloro-3-methylphenol										<1			<1
4-Chlorophenyl phenyl ether										<1			<1
4-Nitrophenol										<3			<3
Acenaphthene										<1			<1
Acenaphthylene										<1			<1
Anthracene										<1			<1
Azobenzene										<1			<1
Benzidine										<5			<5
Benzo(a)anthracene										<5			<5
Benzo(a)pyrene										<1			<1
Benzo(b)fluoranthene										<1			<1
Benzo(g,h,i)perylene										<2			<2
Benzo(k)fluoranthene										<1			<1
Bis(2-chloroethoxy)methane										<2			<2
Bis(2-chloroethyl)ether										<1			<1
Bis(2-chloroisopropyl)ether										<1			<1
Bis(2-ethylhexyl)phthalate	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2			<2
Butyl benzyl phthalate										<1			<1
Chrysene										<1			<1
Dibenzo(a,h)anthracene										<1			<1
Diethyl phthalate										<2			<2
Dimethyl phthalate										<1			<1
Di-n-butyl phthalate										<1			<1
Di-n-octyl phthalate										<1			<1
Fluoranthene										<1			<1
Fluorene										<1			<1
Hexachlorobenzene										<1			<1
Hexachlorobutadiene										<1			<1
Hexachlorocyclopentadiene										<5			<5
Hexachloroethane										<1			<1
Indeno(1,2,3-cd)pyrene										<2			<2
Isophorone										<1			<1
Naphthalene										<1			<1
Nitrobenzene										<1			<1
N-Nitrosodimethylamine										<1			<1
N-Nitroso-di-n-propylamine										<1			<1
N-Nitrosodiphenylamine										<1			<1
Pentachlorophenol										<2			<2
Phenanthrene										<1			<1
Phenol										<1			<1
Pyrene										<1			<1

INLAND EMPIRE UTILITIES AGENCY

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CCWRF (M-004) Effluent Remaining Priority Pollutants

Table 21c

CCWRF (M-004) Effluent Pesticides (EPA Method 608), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
4,4-DDD										<0.006			<0.006
4,4-DDE										<0.006			<0.006
4,4-DDT										<0.008			<0.008
Aldrin										<0.004			<0.004
Alpha-BHC										<0.008			<0.008
Beta-BHC										<0.005			<0.005
Delta-BHC										<0.007			<0.007
Dieldrin										<0.006			<0.006
Endosulfan I										<0.01			<0.01
Endosulfan II										<0.007			<0.007
Endosulfan Sulfate										<0.009			<0.009
Endrin										<0.009			<0.009
Endrin aldehyde										<0.006			<0.006
Gamma-BHC										<0.01			<0.01
Heptachlor										<0.006			<0.006
Heptachlor epoxide										<0.007			<0.007
Chlordane										<0.1			<0.1
PCB-1016										<0.5			<0.5
PCB-1221										<0.5			<0.5
PCB-1232										<0.5			<0.5
PCB-1242										<0.5			<0.5
PCB-1248										<0.5			<0.5
PCB-1254										<0.5			<0.5
PCB-1260										<0.5			<0.5
Toxaphene										<0.5			<0.5
CCWRF (M-004) Effluent Dioxins & Furans, pg/L (reported values based on detection limit)													
PCDD/PCDF Congeners*	<5**									0.0			<5

*TEQ is calculated based on congener concentrations below the reporting limit (RL) set to zero

APPENDIX C

RECYCLED WATER

USERS AND DEMANDS

FOR FISCAL YEAR 2015/16

APPENDIX C
RECYCLED WATER USES AND DEMANDS
FY 2015/16

City of Chino		
Customer Name	Usage Type	Value_AF
Viaverde Nursery	Agricultural	0.21
H PLACENICIA NURSERY	Agricultural	88.45
Nyenhius Dairy	Agricultural	404.70
WESTSTEYN DAIRY	Agricultural	969.44
CW Farms II	Agricultural	35.58
La Brucherie Farms	Agricultural	288.83
C W FARMS IV	Agricultural	330.14
CLEVELAND FARM #1	Agricultural	356.01
CW Farms III	Agricultural	363.30
CW Farms	Agricultural	434.15
Cleveland Farm	Agricultural	552.15
Cal Poly Pomona	Agricultural	896.94
Superior Sod #4	Agricultural	118.15
Superior Sod	Agricultural	158.35
SUPERIOR SOD AIRPORT #1	Agricultural	207.42
Cleveland Farm	Agricultural	47.46
	Chino Agricultural Usage	5251.25
5150 EDISON PARTNERS	Construction	1.16
HENKELS & MC COY INC	Construction	0.00
STICE COMPANY INC	Construction	0.02
MAGNUS PACIFIC CONSTRUCTION	Construction	0.03
Earth Basics	Construction	0.06
SANCON ENGINEERING	Construction	0.08
LENNAR HOMES OF CA	Construction	0.08
SANDERS HYDROSEEDING INC	Construction	0.13
ORANGE COUNTY WATER DISTRICT	Construction	0.43
LENNAR HOMES OF CA	Construction	0.47
NORM WILSON & SONS INC	Construction	0.79
PARKCREST CONSTRUCTION INC	Construction	1.78
WATSON LAND COMPANY	Construction	3.46
Sares Regis Vintage Apartments	Construction	4.35
HILLWOOD CONSTRUCTION	Construction	5.46
BRIDGE HOUSING CORPORATION	Construction	5.88
Portrait Construction, Inc.	Construction	8.57
PARK WEST RESCOM INC	Construction	8.74
Cleveland Farm	Construction	46.23
BOBERG ENGINEERING	Construction	62.41
Griffith Company	Construction	0.08
DR Horton	Construction	0.53
Standard Pacific	Construction	1.17
NORM WILSON & SONS INC	Construction	1.68
KB Homes	Construction	1.88
Lewis Operating Corp	Construction	3.28
Chino Development Corporation	Construction	4.21
PARKCREST CONSTRUCTION INC	Construction	4.50
LENNAR HOMES OF CA	Construction	6.75
WATSON LAND COMPANY	Construction	6.84
Lewis Operating Corp	Construction	30.94

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RECYCLED WATER USES AND DEMANDS
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K HOVNANIAN HOMES	Construction	0.05
R J NOBLE COMPANY	Construction	0.20
MILLIE AND SEVERSON	Construction	0.24
STANDARD PACIFIC OF OC	Construction	0.46
LEMASTER GRADING	Construction	0.49
PARK WEST LANDSCAPE MAINTENANCE	Construction	0.56
KB Homes	Construction	0.56
LEWIS OPERATING CORP	Construction	0.73
CLARK & SONS CONTRACTING	Construction	1.13
Commerce Construction	Construction	1.41
TELEPHONE AVE-SIEROTY BLDG	Construction	1.63
CANNON CONSTRUCTORS	Construction	1.97
LENNAR HOMES OF CA	Construction	12.00
BOBERG ENGINEERING	Construction	14.67
	Chino Construction Usage	248.05
Repet Inc	Industrial	22.11
OLS ENERGY CHINO (WAS CALIF COGEN)	Industrial	144.58
	Chino Industrial Usage	166.68
Excel INC	Landscape	0.00
Inland BioEnergy (IBE)	Landscape	0.01
ROADWAY ENGINEERING	Landscape	0.03
Inland Empire Utilities Agency	Landscape	0.08
5150 EDISON PARTNERS	Landscape	0.17
J F MANUFACTURING INC	Landscape	0.31
Shamrock Marketing	Landscape	0.39
Redbuilt LLC	Landscape	0.45
Colonial Electric	Landscape	0.73
DBRS Medical System	Landscape	0.75
Collins Company	Landscape	0.83
HYUNDAI-KIA AMERICA	Landscape	0.89
KPS GLOBAL LLC	Landscape	1.01
EQUIPMENT WHOLESALERS	Landscape	1.06
Funding Resources	Landscape	1.22
SCOTT ENGINEERING	Landscape	1.51
Valbruna	Landscape	1.60
Gro-Power Inc	Landscape	1.63
Chandler Real Properties	Landscape	1.64
Garrett Concrete	Landscape	1.72
NEXGRILL INDUSTRIES INC	Landscape	1.85
Farrand Enterprises	Landscape	2.00
WESTERN A WEST CA, LLC	Landscape	2.14
Yin, Zhihua	Landscape	2.18
CT Storage-Chino LLC	Landscape	2.21
Yoshimura R&D	Landscape	2.30
Chino Industrial Commons	Landscape	2.41
Kinfine USA Inc	Landscape	2.45
El Prado Rd Business Owners	Landscape	2.54
FUSION 5 CONDO ASSOCIATION	Landscape	2.56
DO + ABLE Product	Landscape	2.66
Redwood Business Center	Landscape	2.78

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Quetico Schaefer Properties	Landscape	2.82
EVERBLOOM ENTERPRISE LLC	Landscape	2.90
EDE GROUP INC	Landscape	2.96
RANCHO DEL CHINO LLC	Landscape	3.07
Chino Industrial Commons-Owners	Landscape	3.37
HILL PHOENIX INC	Landscape	3.75
The Campus Owners Corp	Landscape	3.88
SYNNEX CORPORATION	Landscape	3.92
CENTREPOINTE DISTRIBUTION CENT	Landscape	4.32
CITRUS COMMONS	Landscape	4.43
MOTIVATIONAL FULFILLMENT	Landscape	4.51
Central Business Owners Assoc	Landscape	4.94
Oltmans Construction	Landscape	4.96
PORT LOGISTICS GROUP	Landscape	5.20
MC KESSON MEDICAL	Landscape	5.50
Standard Pacific	Landscape	5.66
SADDLE CREEK CORPORATION	Landscape	5.80
OMNIA ITALIAN DESIGN	Landscape	5.88
DSC Logistics	Landscape	5.90
Chino Hills Ford	Landscape	6.30
WAL-MART STORES INC #07-8103	Landscape	6.67
UMA ENTERPRISES INC	Landscape	7.02
Majestic Management	Landscape	7.40
GILBERT WEST	Landscape	8.06
Warehouse Technology	Landscape	9.27
CP BUSINESS PARK PARTNERS LP	Landscape	9.82
Sundance Spas	Landscape	9.82
EURO-PRO OPERATING INC	Landscape	10.59
NORCO INJECTION MOLDING	Landscape	10.67
Yorba Industrial Center	Landscape	10.70
American Power Conversion	Landscape	11.54
Trammel Crow So Cal Inc	Landscape	12.05
LENNAR HOMES OF CA	Landscape	13.60
WATSON LAND COMPANY	Landscape	16.04
MAJESTIC CHINO GATEWAY	Landscape	17.05
Central Park Industrial PTNRS	Landscape	17.33
VIRAMONTES EXPRESS	Landscape	21.98
AMERICAN HONDA MOTOR CO INC	Landscape	25.31
National Distribution Center	Landscape	32.92
Dept. of Corrections State	Landscape	38.58
Chino Development Corporation	Landscape	65.64
Richardson, Don	Landscape	87.05
ALBERS MANUFACTURING INC	Landscape	0.03
Southern California Edison	Landscape	0.29
San Bdno County Fairgrounds	Landscape	9.65
College Park Community Assoc	Landscape	1.11
Standard Pacific	Landscape	2.00
City of Chino Ayala Park	Landscape	107.63
Evergreen at the Preserve (222671-2)	Landscape	0.06
MEF Realty LLC	Landscape	0.99

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Preserve Master Community	Landscape	1.63
W L Homes	Landscape	2.01
Jasmine Willows HOA	Landscape	2.10
College Park Community Assoc 1	Landscape	2.23
DR Horton	Landscape	3.02
Woodbury Neighborhood Association	Landscape	4.78
WESTERN NATION CONTRACTORS	Landscape	5.39
COLLEGE PARK COMMUNITES	Landscape	6.11
Evergreen at The Preserve	Landscape	7.41
College Park Communty Assoc 2	Landscape	7.45
STANDARD PACIFIC OF OC	Landscape	7.65
AGAVE NEIGHBORHOOD ASSOCIATION	Landscape	7.97
Panattoni Construction	Landscape	9.25
SEACOUNTRY HOMES	Landscape	9.29
Preserve Master Corp	Landscape	15.26
Tetherwinds Neighborhood	Landscape	23.61
Sares Regis Vintage Apartments	Landscape	26.20
The Preserve Master Community	Landscape	26.64
Lewis Operating Corp	Landscape	29.77
Preserve Maintenance Corp	Landscape	30.11
KB Homes	Landscape	37.71
PRESERVE MASTER MAINTENANCE	Landscape	65.54
College Park Community Assoc	Landscape	85.10
LENNAR HOMES OF CA	Landscape	107.02
Chaffey College	Landscape	9.18
K-8 SCHOOL (PRESERVE)	Landscape	14.63
BIRCHWOOD & GREENBRIER COMM ASSOC	Landscape	1.42
Cal Trans	Landscape	1.51
Chino Development Corporation	Landscape	2.73
WELLESLEY NEIGHBORHOOD	Landscape	3.10
KB Homes	Landscape	3.54
Standard Pacific	Landscape	7.59
MONTE VISTA #3	Landscape	10.38
LENNAR HOMES OF CA	Landscape	12.56
STANDARD PACIFIC OF OC	Landscape	15.40
LEWIS OPERATING CORP	Landscape	20.50
UMA ENTERPRISES INC	Landscape	22.08
NMC BUILDERS LLC	Landscape	22.82
City of Chino	Landscape	169.87
Lewis Operating Corp	Landscape	2.33
HARPER CONSTRUCTION	Landscape	2.86
	Chino Landscape Usage	1550.69
	Chino Total Usage	7216.68

APPENDIX C
RECYCLED WATER USES AND DEMANDS
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City of Chino Hills		
Customer Name	Usage Type	Value AF
Fullmer Construction	Construction	1.10
D'Vargas Construction	Construction	1.42
Fairfield Chino Hills LP	Construction	2.00
Jeremy Harris Construction Inc.	Construction	0.06
Standard Pacific	Construction	4.44
Standard Pacific	Construction	6.65
Avalonbay Communities, Inc.	Construction	8.71
Altfillisch Contractors	Construction	-16.53
	Chino Hills Construction Usage	7.84
Circle K	Landscape	0.32
Pinehurst Hills Comm Assoc	Landscape	0.41
Vista San Juan/ C.C. Medical Center	Landscape	1.34
Country Club Market Place II	Landscape	1.49
Hyoung Corp	Landscape	1.88
Chino Hills Storage	Landscape	1.94
Dennys	Landscape	2.78
7-Eleven (15450 Fairfield Ranch Rd)	Landscape	3.41
Chino Hills Mall	Landscape	3.77
Chino Valley Community Church	Landscape	4.38
Albertsons	Landscape	4.40
City of Chino Hills	Landscape	5.76
Pine Corp Center (4274439)	Landscape	5.91
Pine Corp Center (4279489)	Landscape	11.18
DZ Properties, Inc.	Landscape	13.18
EGM Management	Landscape	18.94
Artisan	Landscape	31.59
Standard Pacific	Landscape	43.26
Chino Hills Business Park	Landscape	46.70
CVUFD	Landscape	0.09
Country Club Villa	Landscape	2.36
Vellano	Landscape	2.40
City of Chino Hills	Landscape	3.88
Standard Pacific	Landscape	4.01
Vellano Golf Course	Landscape	18.29
Los Serranos Golf Course	Landscape	292.31
Chino Valley Fire	Landscape	1.44
Sycamore Heights Comm Assoc	Landscape	0.31
Fairfield Chino Hills LP	Landscape	2.97
City of Chino Hills	Landscape	5.56
Chino Hills Community Center	Landscape	10.52
Rincon Park	Landscape	15.77
Big League Dreams	Landscape	47.27
Fairfield Chino Hills LP	Landscape	0.00
Fieldstone	Landscape	0.57
Lexington	Landscape	0.65
Sycamore Heights Comm Assoc	Landscape	1.36
BRE Properties	Landscape	6.52
Fairfield Ranch HOA	Landscape	6.75

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Los Serranos Ranch Comm. Assoc.	Landscape	9.19
Higgins Ranch Community	Landscape	10.21
Taylor Woodrow	Landscape	12.34
BRR HOA	Landscape	20.31
Centex	Landscape	23.56
Ridgegate HOA	Landscape	57.79
Vellano Homeowner	Landscape	115.21
New Vellano	Landscape	250.33
Chapparral Elem. School (4342912)	Landscape	7.62
Wickman Elem	Landscape	9.61
C.U.S.D.	Landscape	28.56
Natures Image Inc	Landscape	2.98
Cal Trans	Landscape	3.59
Ridgegate Neighborhood Assoc	Landscape	3.93
Felfam,Ltd	Landscape	8.69
Standard Pacific	Landscape	10.82
City of Chino Hills	Landscape	185.59
	Chino Hills Landscape Usage	1,385.93
	City of Chino Hills Total Usage	1,393.77

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Cucamonga Valley Water District (CVWD)		
Customer Name	Usage Type	Value AF
Lennar Homes (CVWD)	Construction	25.71
San Bernardino county flood control	Construction	0.19
	CVWD Construction Usage	25.90
Prologis	Landscape	30.89
PSIP WR Etiwanda LLC	Landscape	27.02
O & S Holdings	Landscape	24.94
Bradshaw International, Inc	Landscape	24.21
Srathmore Maintenance Corp.	Landscape	21.35
Home Depot	Landscape	20.21
Hilemen Development Co.	Landscape	19.32
Bass Pro Shop	Landscape	18.76
Owens and Minor Distributing inc	Landscape	16.71
Cal Development LLC	Landscape	16.30
Victoria Gardens(Shea Homes)	Landscape	16.08
Exchange Professional Center	Landscape	15.71
CPT 6th & Cleveland LLC	Landscape	14.68
Frito Lay Inc.	Landscape	13.77
Cabot Industrial Trust	Landscape	11.61
Earth Basics	Landscape	11.34
CIP Real Estate	Landscape	10.56
Stadium Plaza South	Landscape	10.04
Market Place Properties	Landscape	9.67
Southern California Edison	Landscape	9.26
Life Way Church	Landscape	7.70
Stadium Plaza North	Landscape	7.50
pac r cucamonga lp	Landscape	6.86
Mission Business Center LLC	Landscape	6.85
O&S(Foothill Crossings)	Landscape	5.07
Richard Dick & Associates	Landscape	4.26
Rackafeller group	Landscape	3.25
DEDEAUX PROPERTIES LLC	Landscape	2.71
Facility Builders & Erectors	Landscape	2.13
ASAP power sports	Landscape	1.74
Vega Industries	Landscape	1.65
Comfort - Pedic Mattress USA	Landscape	1.61
CSF INC	Landscape	1.15
Milliken Hospitality LLC	Landscape	1.07
Stanley Steamers	Landscape	1.02
Toyota Motor Sales	Landscape	0.76
Wells Fargo Bank	Landscape	0.75
CalTrans	Landscape	0.74
Cal National Bank	Landscape	0.51
Murfco INC.	Landscape	0.45
Starbuck's Coffee	Landscape	0.33
Harrys Pacific Grill	Landscape	0.31
Oak Creek Ranch Golf Club Inc.	Landscape	289.16
City of Rancho Cucamonga	Landscape	0.49
City of Rancho Cucamonga	Landscape	0.15

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Goodman Rancho SPE, LLC	Landscape	39.26
Day creek aps	Landscape	33.08
The Hawthornes	Landscape	5.29
Alta Loma High School	Landscape	52.71
Etiwanda School District	Landscape	47.15
City of Rancho Cucamonga	Landscape	240.16
City of Fontana	Landscape	7.32
Haven Rock	Landscape	3.77
CVWD Recycled Water Useage (AF)	Landscape	0.14
Various	Landscape	0.07
	CVWD Landscape Usage	1119.61
	CVWD Total Usage	1145.50

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Inland Empire Utilities Agency (IEUA)		
Customer Name	Usage Type	Value_AF
ESCI	Industrial	3.47
Genon Energy Plant	Industrial	253.12
IERCF	Industrial	14.43
	IEUA Industrial Total	271.02
Greenlee Nursery	Landscape	0.00
Chino Creek Park Evaporation	Landscape	122.84
IEUA Headquarters	Landscape	129.46
Chino Creek Wetlands and Educational Park	Landscape	17.76
	IEUA Landscape Total	270.06
	IEUA Total Usage	541.08

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Monte Vista Water District (MVWD)		
Customer Name	Usage Type	Value_AF
Montclair Hi School	Landscape	63.24
Saratoga Park	Landscape	39.37
Montclair Town Center	Landscape	25.59
Montclair Town Center	Landscape	4.27
Buena Vista Elem School	Landscape	25.18
Sunset Park	Landscape	20.60
Montclair Medical Center	Landscape	17.38
Monte Vista Elementary School	Landscape	12.13
Alma Hoffman Park	Landscape	11.91
Kingsley Elem School	Landscape	10.76
Kingsley Park	Landscape	10.38
Lehigh Elementary School	Landscape	9.80
Wilderness Basin Park	Landscape	8.38
Sunrise Park	Landscape	7.47
Library/City Hall	Landscape	6.16
City Hall	Landscape	3.28
Our Lady of Lourdes Church	Landscape	1.26
Demonstration Garden	Landscape	0.58
Monte Vista Water District	Landscape	0.57
Golden Girls Park	Landscape	0.00
Montclair Towncenter HOA	Landscape	0.00
	MVWD Landscape Usage	278.32
	MVWD Total Usage	278.32

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Ontario		
Customer Name	Usage Type	Value_AF
Rojo Farms	Agricultural	7.42
FRUIT GROWERS SUPPLY	Agricultural	21.02
Barth Farms	Agricultural	53.49
Yoog II Farm Inc.	Agricultural	101.98
Breezy Boots, Inc	Agricultural	105.93
LaBrucherie Farm	Agricultural	107.73
Legend Dairies (Petersma)	Agricultural	109.71
Bootsma Farm	Agricultural	137.61
Li Yuan Farms	Agricultural	203.57
Li Farm (Western Oriental Growers)	Agricultural	213.40
Cleveland Farm	Agricultural	238.08
GH Dairy	Agricultural	317.16
Murai Farm	Agricultural	327.88
GH Dairy	Agricultural	351.18
Cleveland Farm	Agricultural	615.72
Lewis Farms	Agricultural	702.18
	Ontario Agricultural Usage	3614.05
The Realty Associates Fund X LP	Construction	0.29
City of Ontario Street Sweepers	Construction	1.24
Majestic Mgt CCC IV (Bldg. 6)	Construction	1.38
Tri Pointe Homes	Construction	1.51
NMC Builders LLC	Construction	1.79
SL Ontario Development Co	Construction	3.10
Advent Companies	Construction	4.44
Salsbury Engineering	Construction	5.47
Stice Company	Construction	19.20
James McMinn, Inc	Construction	101.49
STICE COMPANY INC	Construction	368.59
	Ontario Construction Usage	508.50
Cintas	Industrial	87.14
New Indy Ontario	Industrial	866.95
	Ontario Industrial Usage	954.09
Aladdin Industrial Corporation	Landscape	0.00
Diesel Emissions	Landscape	0.05
Kellogg Supply Inc.	Landscape	0.10
Parks Dept. (Holt Median W/O Vineyard)	Landscape	0.24
Panattoni Developement (03453746) 2250 S Archibald	Landscape	0.31
Top & Tech	Landscape	0.33
24 Hour Fitness	Landscape	0.36
Sierra Insulation	Landscape	0.45
Pacific Lewis Properties	Landscape	0.47
LBA Realty (4 meters)	Landscape	0.48
Dial Chemical	Landscape	0.55
Dura Coat Powder Coating	Landscape	0.59
Piemonte Business Park (04306405)	Landscape	0.60
BP West Coast Products,LLC #5965	Landscape	0.63
Khaloghli, Khosro	Landscape	0.68
Ontario Collision Center	Landscape	0.76

APPENDIX C
RECYCLED WATER USES AND DEMANDS
FY 2015/16

M. Craitenberger	Landscape	0.78
Stein & Roitblat Living Trusts	Landscape	0.78
Cal Trans Do8 ONT	Landscape	0.79
Inland Empire Utilities Agency	Landscape	0.80
City of Ontario (Fire Station #6)	Landscape	0.81
So Cal Mechanical	Landscape	0.87
Just Do It 4 Less.Com LLC	Landscape	0.88
JMS Wineville	Landscape	0.88
CBWCD Ely Basin #3	Landscape	0.93
Acco America	Landscape	1.00
Roshan LLC (La Galleria at the Mills)	Landscape	1.05
Parks Dept. (Haven Parkway)	Landscape	1.09
Akzo Nobel Coatings (Haven B)	Landscape	1.17
Piemonte Business Park (04930593)	Landscape	1.23
Piemonte Business Park (04920427)	Landscape	1.27
LBA Realty (4 meters)	Landscape	1.41
CK Restaurants	Landscape	1.44
Brookfield Ontario Builders	Landscape	1.52
Castle Industries	Landscape	1.54
Woodside 055LP	Landscape	1.56
City of Ontario (Holt/Guasti East)	Landscape	1.61
Archibald Freeway Center Owners Assoc.	Landscape	1.66
Customized Distribution	Landscape	1.73
NMC Builders LLC	Landscape	1.74
Advanced Innovative Technology	Landscape	1.77
Caliber Collision	Landscape	1.83
Piemonte Business Park (04725037)	Landscape	1.88
SJC II/Fourth and Haven	Landscape	2.00
City of Ontario (Holt/Guasti West)	Landscape	2.04
Nexen Tire America Inc	Landscape	2.09
Target	Landscape	2.44
Mabela LP	Landscape	2.59
Comstock Homes	Landscape	2.64
Poseidon Ontario Airport Plaza	Landscape	2.76
KB Homes	Landscape	2.83
Concours Retail	Landscape	2.85
Haliburton	Landscape	2.85
Vineyard Industrial II, LLC	Landscape	2.87
Ontario Convention Center (North)	Landscape	2.87
Piemonte 5-story	Landscape	2.96
Brookfield Land Const	Landscape	2.96
Majestic Management	Landscape	3.05
Ont Indusruial Partn	Landscape	3.18
Haven Ave LLC	Landscape	3.23
Wella Mfg	Landscape	3.25
Chevron Land	Landscape	3.38
Hino Motor Manufacturing	Landscape	3.42
Park Place Master Community Assoc	Landscape	3.72
Golden State Container	Landscape	3.94
G & K Services	Landscape	3.98

APPENDIX C
RECYCLED WATER USES AND DEMANDS
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Warmington Residential Comm. (04748546)	Landscape	3.98
Piemonte Business Park (04934728)	Landscape	3.99
Vineyard Industrial II, LLC	Landscape	4.03
Panattoni Development (Best Buy)	Landscape	4.16
Niagara Water	Landscape	4.16
City of Ontario (4th/Milliken Parkway)	Landscape	4.17
T S Express	Landscape	4.29
Ruth Group	Landscape	4.33
Archibald & Philadelph (03624103) 2260 S Archibald	Landscape	4.62
Flags Importer	Landscape	4.77
Bedford Properties	Landscape	4.86
Parks Dept. (Galanis Park)	Landscape	5.08
Archibald Freeway Center Owners Assoc.	Landscape	5.09
Ontario Lodging Associates LLC	Landscape	5.32
Lord Baltimore Properties	Landscape	5.42
HMC Architects	Landscape	5.47
OM Guasti	Landscape	5.55
Brookfield Land Const	Landscape	5.77
Mercedes Benz of Ontario	Landscape	6.09
Concours Plaza	Landscape	6.82
Camden Development Inc	Landscape	7.11
Lennar Homes	Landscape	7.33
RYLAND HOMES OF CA	Landscape	7.51
Ontario Commerce Park	Landscape	7.85
Vintage Apts.	Landscape	7.87
NMC Builders LLC	Landscape	8.21
Ferrari Corporate Center LLC	Landscape	8.28
Camden Development Inc	Landscape	8.44
CCC-N	Landscape	8.53
Dorthy Gibson Continuation School	Landscape	8.64
Vina Danks Junior High	Landscape	9.58
Kohls	Landscape	9.80
Brookfield Land Const	Landscape	10.11
Stratham Communities	Landscape	10.39
City of Ontario	Landscape	10.52
Grove Memorial Park	Landscape	10.70
Airport Corp. Center @ Centrelake	Landscape	11.83
Tri Pointe Homes	Landscape	12.33
Walmart	Landscape	12.40
Del Norte Elementary School	Landscape	13.13
Vineyard Park	Landscape	13.80
City of Ontario	Landscape	14.68
Brookfield Land Const	Landscape	15.34
Kaiser	Landscape	15.59
Shelby Office Park (PDEV04-006)	Landscape	16.05
Corona Elementary School (OMSD)	Landscape	16.10
Ont/Mont School Dist - Elem School	Landscape	16.12
Parkside Ontario Community Assoc	Landscape	16.16
Ont Convention Center	Landscape	16.68
Ontario Motor Speedway Park	Landscape	17.05

APPENDIX C
RECYCLED WATER USES AND DEMANDS
FY 2015/16

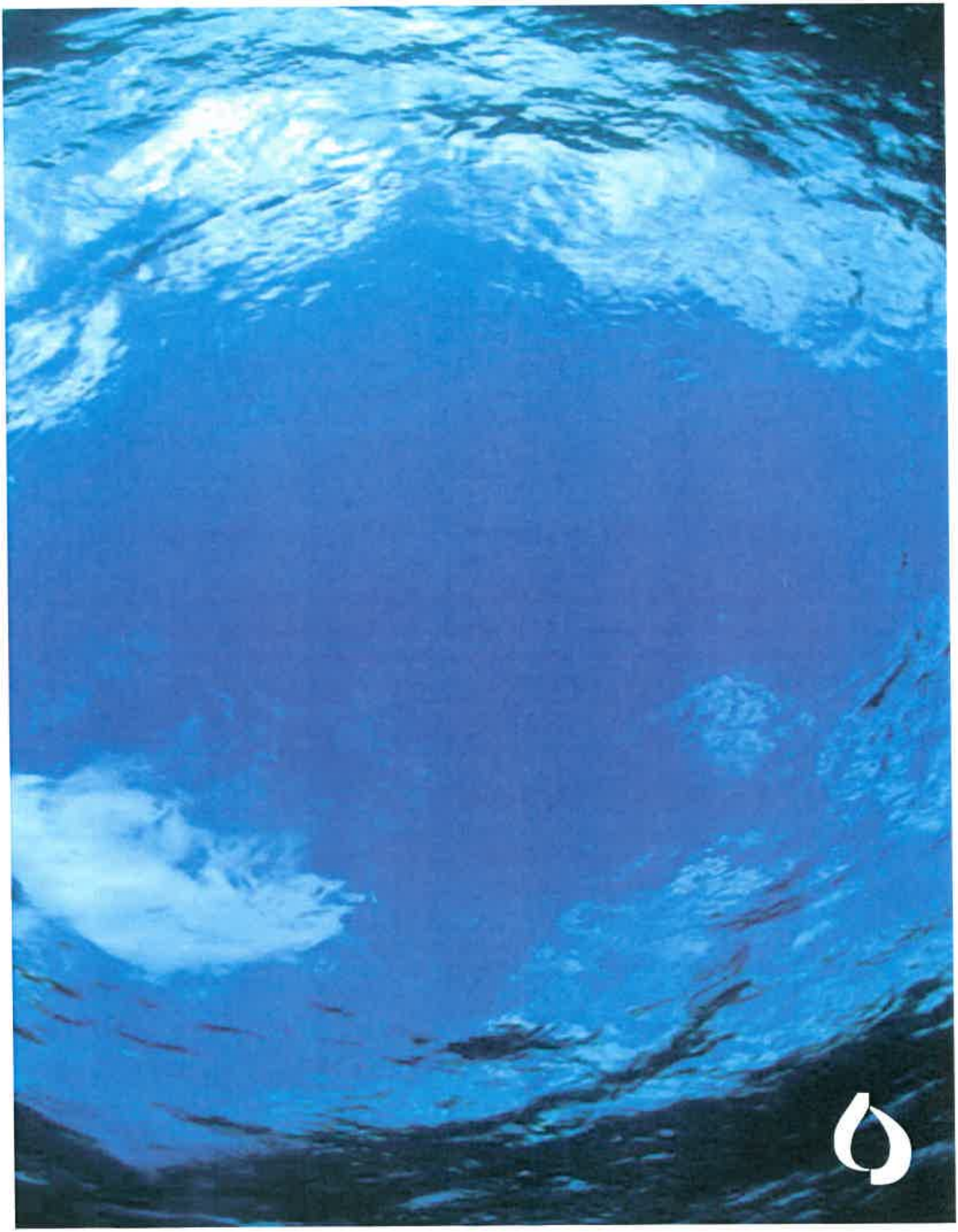
Ontario Health Education	Landscape	17.88
Cal Trans Do8 ONT	Landscape	18.55
Empire Towers	Landscape	19.48
Brookfield Ontario Builders	Landscape	19.81
Parks Dept. (Veterans Park)	Landscape	20.25
Pier 1 Imports	Landscape	22.15
Ontario Airport Center	Landscape	22.58
Pancal Portfolio, LLC	Landscape	24.45
Doubletree	Landscape	25.06
Ontario Montclair School Dist.	Landscape	25.43
Chaffey High School (Valley View)	Landscape	25.93
Mathis Brothers Furniture	Landscape	25.94
Parks Dept. (Galvin Park West)	Landscape	26.93
Centrelake Assn	Landscape	28.10
California Commerce Center	Landscape	31.19
Galvin Park	Landscape	31.38
Calif Com Cntr Owners (North)	Landscape	32.54
Ontario Center (Founders Garden)	Landscape	34.13
Chaffey High School	Landscape	34.81
Prologis California	Landscape	37.11
City of Ontario (Soccer Complex)	Landscape	42.24
CCC-S	Landscape	42.37
Vineyard STEM School	Landscape	45.53
SL Ontario Development Co	Landscape	46.57
Munoz Park	Landscape	50.67
Westwind Park	Landscape	56.22
AEG Ontario Arena	Landscape	59.16
Toyota	Landscape	59.97
CalTrans	Landscape	65.34
Majestic Reality	Landscape	70.45
CCC-N	Landscape	74.24
Chevron Land	Landscape	99.47
Guasti Park	Landscape	103.15
Bellevue Cemetary	Landscape	120.98
Whispering Lakes Golf Course	Landscape	475.17
	Ontario Landscape Usage	2489.79
	Ontario Total Usage	7566.42

APPENDIX C
RECYCLED WATER USES AND DEMANDS
FY 2015/16

Recharge Basins		
Customer Name	Usage Type	Value_AF
RP-3	Recharge	3282.00
Banana Basin	Recharge	2106.00
Turner Basin	Recharge	1958.00
7th & 8th Street	Recharge	1470.00
Brooks Basin	Recharge	1215.00
Ely Basin	Recharge	1012.00
Declez Basin	Recharge	969.00
Victoria Basin	Recharge	635.00
Hickory Basin	Recharge	575.00
San Sevaine No. 5	Recharge	0.00
	Recharge Basins Total	13222.00

San Bernardino County		
Customer Name	Usage Type	Value_AF
El Prado Park	Landscape	373.33
El Prado Golf Course	Landscape	162.78
	SBCO Landscape Usage	536.11
	SBCO Total Usage	536.11

Upland		
Customer Name	Usage Type	Value_AF
Garrsion Foothill Nursery	Agricultural	0.43
Tolle Nursery	Agricultural	2.32
	Upland Agricultural Usage	2.75
Cal - Trans	Construction	3.72
	Upland Construction Usage	3.72
Drydock Depot	Landscape	2.13
SCE	Landscape	5.01
San Antonio Hosipital	Landscape	9.49
Upland Hills Country Club	Landscape	370.29
Western Inn	Landscape	2.30
Bouquet Estates	Landscape	7.50
City of Upland / Sierra Vista Park	Landscape	17.29
City of Upland / Memorial Park	Landscape	72.21
Upland Meadows Estates	Landscape	8.83
Mountain View Estates	Landscape	17.30
Upland Unified School District	Landscape	2.47
Upland JR H.S.	Landscape	14.07
Sierra Vista Elementary	Landscape	16.66
Upland Elementary	Landscape	19.38
Foothhill Knolls Elementary	Landscape	25.60
San Antonio Hosipital	Landscape	1.58
City of Upland	Landscape	120.20
	Upland Landscape Usage	712.32
	Upland Total Usage	718.78



Recycled Water Semi-Annual Update FY 2015/16

Andy Campbell

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

IEUA Board of Directors Meeting
September 2016

RW Project- Wineville Pipeline

- Wineville Extension to RP3
  - Capital Improvements Complete
  - Approx. 3,000 AFY RW Capacity
  - Increased RP3 Delivery Capacity
    - 4 cfs to 20 cfs
    - Initiated Sept. 9 2015
    - RP3 RW 15/16 delivery was 3282 AF
  - Allows Declez Basin RW Start-Up
    - 4 to 8 cfs
    - Initiated Dec. 23, 2015
    - Declez RW 15/16 delivery was 969 AF

RW Project- San Sevaine

- San Sevaine 5 Pump Station & Pipeline to upper 3 Basins
  - 85% design August 2016
  - January 2017 Bid & Award
  - 1 year Construction
  - Estimated Completion January 2018
  - Approx. 4,000-6,000 AFY RW Capacity

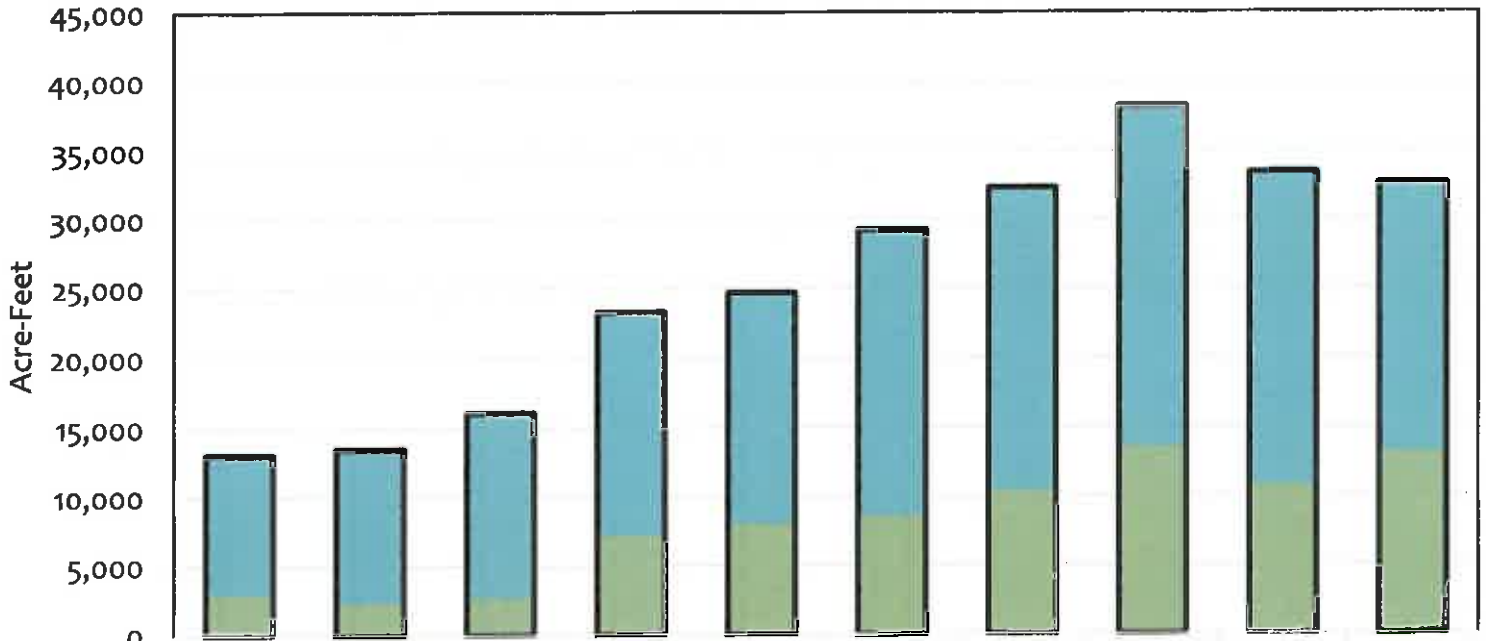
RW Projects

- Prop 1 Grant Projects
  - State Board requested additional CEQA Information
  - Pending Award Notifications (1) December 2016 and (2) February 2017

Project Name	Status	Estimated Completion Date	Project Benefit (AFY)	Prop 1 Group
San Sevaine Basin Improvements	Design	Jan-18	4,000 - 6,000	1
Napa Lateral	Pre Design	Dec-18	1,000	1
RP-1 1158 PS Upgrades	Pre Design	Jul-19	Reliability	2
RP-5 RW Pipeline Bottleneck	Pre Design	Dec-18	Reliability	2
Pressure Sustaining Valve Installation	Pre Design	Dec-18	Reliability	2
RP-1 Parallel Outfall Pipeline	Pre Design	Dec-18	Reliability	2
Baseline RW Extension (Village of Heritage)	Pre Design	Dec-18	100	2
City of Ontario Euclid/Riverside Pipeline	Design	Dec-18	600 - 1,200	2

- 1630 W. and 1630 E. Surge Projection Projects
  - Estimated completion: October 2016

FY15/16 RW Demand



	FY06-07	FY07-08	FY08-09	FY 09-10	FY 10-11	FY 11-12	FY 12-13	FY 13-14	FY 14/15	FY 15/16
Direct	10,048	11,153	13,361	16,057	16,656	20,556	21,840	24,659	22,580	19,397
GWR	2,981	2,340	2,684	7,208	8,028	8,634	10,479	13,593	10,840	13,222
Total	13,029	13,493	16,045	23,265	24,684	29,190	32,319	38,252	33,420	32,619

RW GWR Allocations

Agency	Pro Rata Share	Recharge Allocation * (Acre-Feet) FY15/16
Chino	10.6%	1,302
Chino Hills	8.9%	1,097
CVWD	25.2%	3,099
Fontana	19.2%	2,368
Montclair	4.5%	548
Ontario	21.7%	2,667
Upland	10.0%	1,226
Total	**100.0%**	
JCSD's Allocation:		915
Total Amount Recharged:		**13,222**

*Updated from August 25 Technical and September 1 Policy Committee Presentations